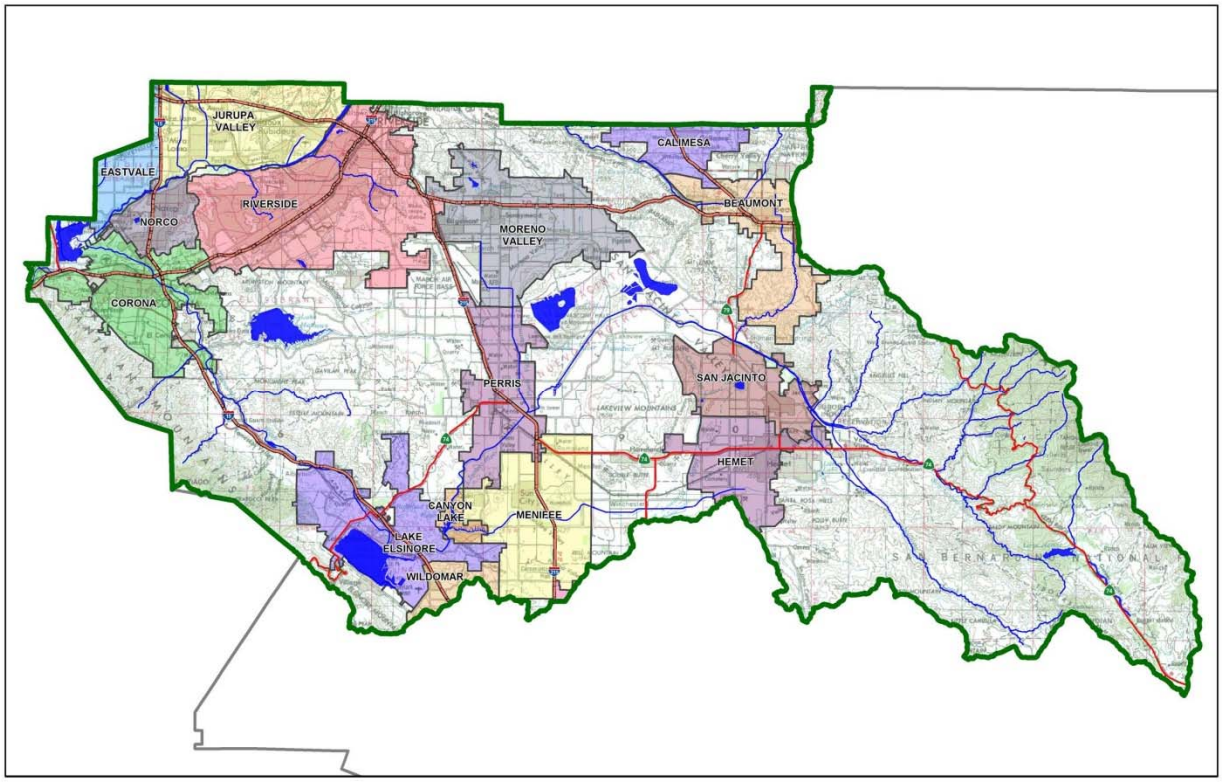
# Project Specific Water Quality Management Plan

*A Template for Projects located within the **Santa Ana Watershed** Region of Riverside County*

**Project Title:** Hemet 30

**Development No:** TTM 37737

**Design Review/Case No:** TBD




☒ **Preliminary**
☐ **Final**

**Original Date Prepared**: March 9, 2021

**Revision Date(s)**: November 5, 2021

*Prepared for Compliance with*
*Regional Board Order No*. **R8-2010-0033**

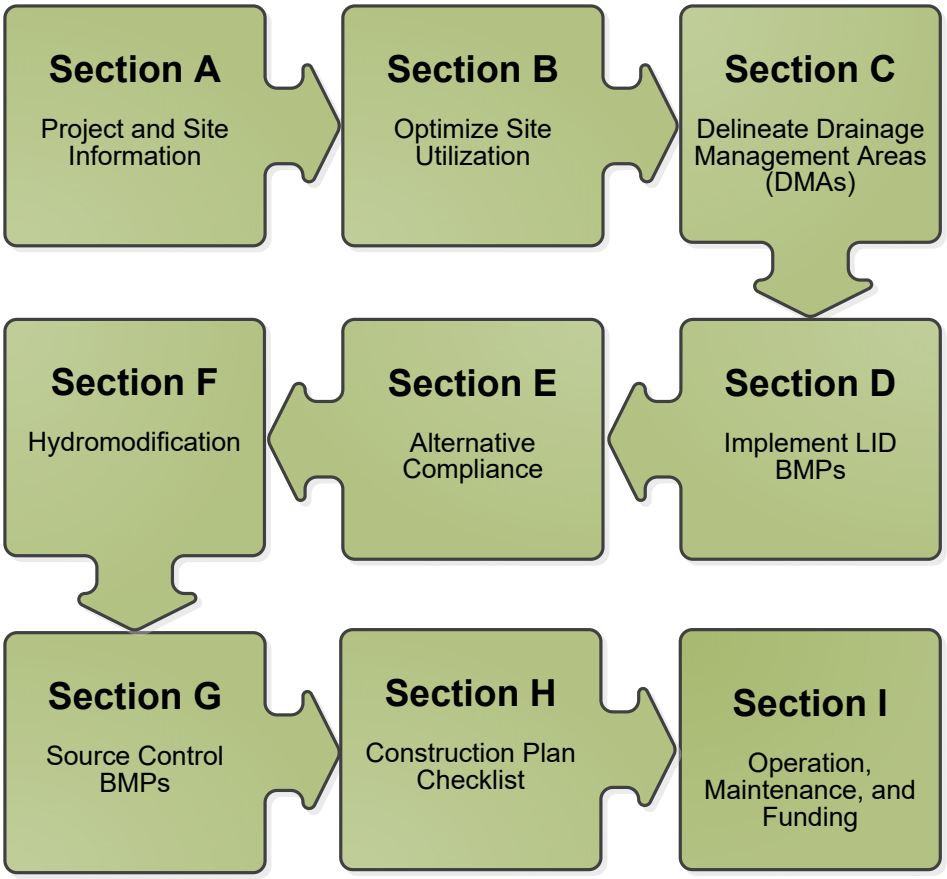
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## A Brief Introduction

This Project-Specific WQMP Template for the **Santa Ana Region** has been prepared to help guide you in documenting compliance for your project. Because this document has been designed to specifically document compliance, you will need to utilize the WQMP Guidance Document as your "how-to" manual to help guide you through this process. Both the Template and Guidance Document go hand-in-hand, and will help facilitate a well prepared Project-Specific WQMP. Below is a flowchart for the layout of this Template that will provide the steps required to document compliance.



## OWNER'S CERTIFICATION

This Project-Specific Water Quality Management Plan (WQMP) has been prepared for DDE Hemet, LLC by JLC Engineering and Consulting, Inc. for the Hemet 30 project.

This WQMP is intended to comply with the requirements of the County of Riverside for Ordinance No. 754.2 which includes the requirement for the preparation and implementation of a Project-Specific WQMP.

The undersigned, while owning the property/project described in the preceding paragraph, shall be responsible for the implementation and funding of this WQMP and will ensure that this WQMP is amended as appropriate to reflect up-to-date conditions on the site. In addition, the property owner accepts responsibility for interim operation and maintenance of Stormwater BMPs until such time as this responsibility is formally transferred to a subsequent owner. This WQMP will be reviewed with the facility operator, facility supervisors, employees, tenants, maintenance and service contractors, or any other party (or parties) having responsibility for implementing portions of this WQMP. At least one copy of this WQMP will be maintained at the project site or project office in perpetuity. The undersigned is authorized to certify and to approve implementation of this WQMP. The undersigned is aware that implementation of this WQMP is enforceable under the County of Riverside Water Quality Ordinance (Municipal Code Section754.2).

"I, the undersigned, certify under penalty of law that the provisions of this WQMP have been reviewed and accepted and that the WQMP will be transferred to future successors in interest."

| | |
|---|---|
| Owner's Signature | Date |
| Owner's Printed Name | Owner's Title/Position |

## PREPARER'S CERTIFICATION

"The selection, sizing and design of stormwater treatment and other stormwater quality and quantity control measures in this plan meet the requirements of Regional Water Quality Control Board Order No. **R8-2010-0033** and any subsequent amendments thereto."



| | |
|---|---|
| Preparer's Signature | Date |
| Joseph L. Castaneda | P.E. / Project Manager |
| Preparer's Printed Name | Preparer's Title/Position |

Preparer's Licensure:



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# Section A: Project and Site Information

| PROJECT INFORMATION | |
|---|---|
| Type of Project: | Residential |
| Planning Area: | N/A |
| Community Name: | N/A |
| Development Name: | Hemet 30 |
| **PROJECT LOCATION** | |
| Latitude & Longitude (DMS): 33°44'32" N 117°03'22" W | |
| Project Watershed and Sub-Watershed: Santa Ana Watershed, San Jacinto River sub Watershed | |
| APN(s): 465-040-025, 465-040-026, 465-040-027 | |
| Map Book and Page No.: TBD | |
| **PROJECT CHARACTERISTICS** | |
| Proposed or Potential Land Use(s) | Residential |
| Proposed or Potential SIC Code(s) | N/A |
| Area of Impervious Project Footprint (SF) | 1,000,573 |
| Total Area of proposed Impervious Surfaces within the Project Limits (SF)/or Replacement | 576,299 |
| Does the project consist of offsite road improvements? | ☐ Y ☒ N |
| Does the project propose to construct unpaved roads? | ☐ Y ☒ N |
| Is the project part of a larger common plan of development (phased project)? | ☐ Y ☒ N |
| **EXISTING SITE CHARACTERISTICS** | |
| Total area of existing Impervious Surfaces within the project limits (SF) | 0 |
| Is the project located within any MSHCP Criteria Cell? | ☐ Y ☒ N |
| If so, identify the Cell number: | N/A |
| Are there any natural hydrologic features on the project site? | ☐ Y ☒ N |
| Is a Geotechnical Report attached? | ☒ Y ☐ N |
| If no Geotech. Report, list the NRCS soils type(s) present on the site (A, B, C and/or D) | N/A |
| What is the Water Quality Design Storm Depth for the project? | 0.68 |

## A.1 Maps and Site Plans

When completing your Project-Specific WQMP, include a map of the local vicinity and existing site. In addition, include all grading, drainage, landscape/plant palette and other pertinent construction plans in Appendix 2. At a **minimum**, your WQMP Site Plan should include the following:

- Drainage Management Areas
- Proposed Structural BMPs
- Drainage Path
- Drainage Infrastructure, Inlets, Overflows
- Source Control BMPs
- Buildings, Roof Lines, Downspouts
- Impervious Surfaces
- Standard Labeling

Use your discretion on whether or not you may need to create multiple sheets or can appropriately accommodate these features on one or two sheets. Keep in mind that the Co-Permittee plan reviewer must be able to easily analyze your project utilizing this template and its associated site plans and maps.

## A.2 Identify Receiving Waters

Using Table A.1 below, list in order of upstream to downstream, the receiving waters that the project site is tributary to. Continue to fill each row with the Receiving Water's 303(d) listed impairments (if any), designated beneficial uses, and proximity, if any, to a RARE beneficial use. Include a map of the receiving waters in Appendix 1.

**Table A.1** Identification of Receiving Waters

| Receiving Waters | EPA Approved 303(d) List Impairments | Designated Beneficial Uses | Proximity to RARE Beneficial Use |
|---|---|---|---|
| Salt Creek Channel | N/A | REC1, REC2, WAR, WILD | Not a RARE-designated water body |
| Canyon Lake | Nutrients | MUN, AGR, GWR, REC1, REC2, WAR, WILD | Not a RARE-designated water body |
| San Jacinto River – Reach 1 | N/A | MUN, AGR, GWR, REC1, REC2, WARM, WILD | Not a RARE-designated water body |
| Lake Elsinore | Other Organics (Polychlorinated Biphenyls); Nutrients (Nutrients, Organic Enrichment/Low Dissolved Oxygen); Toxicity; Pesticides (Dichlorodiphenyltrichloroethane) | REC1, REC2, WARM, WILD | Not a RARE-designated water body |

## A.3 Additional Permits/Approvals required for the Project:

**Table A.2** Other Applicable Permits

| Agency | Permit Required | |
|---|---|---|
| State Department of Fish and Game, 1602 Streambed Alteration Agreement | ☐ Y | ☒ N |
| State Water Resources Control Board, Clean Water Act (CWA) Section 401 Water Quality Cert. | ☐ Y | ☒ N |
| US Army Corps of Engineers, CWA Section 404 Permit | ☐ Y | ☒ N |
| US Fish and Wildlife, Endangered Species Act Section 7 Biological Opinion | ☐ Y | ☒ N |
| Statewide Construction General Permit Coverage | ☒ Y | ☐ N |
| Statewide Industrial General Permit Coverage | ☐ Y | ☒ N |
| Western Riverside MSHCP Consistency Approval (e.g., JPR, DBESP) | ☐ Y | ☒ N |
| Other *(please list in the space below as required)* | ☐ Y | ☐ N |

If yes is answered to any of the questions above, the Co-Permittee may require proof of approval/coverage from those agencies as applicable including documentation of any associated requirements that may affect this Project-Specific WQMP.

# Section B: Optimize Site Utilization (LID Principles)

Review of the information collected in Section 'A' will aid in identifying the principal constraints on site design and selection of LID BMPs as well as opportunities to reduce imperviousness and incorporate LID Principles into the site and landscape design. For example, constraints might include impermeable soils, high groundwater, groundwater pollution or contaminated soils, steep slopes, geotechnical instability, high-intensity land use, heavy pedestrian or vehicular traffic, utility locations or safety concerns. Opportunities might include existing natural areas, low areas, oddly configured or otherwise unbuildable parcels, easements and landscape amenities including open space and buffers (which can double as locations for bioretention BMPs), and differences in elevation (which can provide hydraulic head). Prepare a brief narrative for each of the site optimization strategies described below. This narrative will help you as you proceed with your LID design and explain your design decisions to others.

The 2010 Santa Ana MS4 Permit further requires that LID Retention BMPs (Infiltration Only or Harvest and Use) be used unless it can be shown that those BMPs are infeasible. Therefore, it is important that your narrative identify and justify if there are any constraints that would prevent the use of those categories of LID BMPs. Similarly, you should also note opportunities that exist which will be utilized during project design. Upon completion of identifying Constraints and Opportunities, include these on your WQMP Site plan in Appendix 1.

## Site Optimization

The following questions are based upon Section 3.2 of the WQMP Guidance Document. Review of the WQMP Guidance Document will help you determine how best to optimize your site and subsequently identify opportunities and/or constraints, and document compliance.

Did you identify and preserve existing drainage patterns? If so, how? If not, why?

*The project site currently drains from west to east. The post-project condition will mimic this flow pattern by conveying the westerly offsite flows through an interim channel with a two foot berm that will allow flows to pond and sheet flow.*

Did you identify and protect existing vegetation? If so, how? If not, why?

*The project site will not preserve existing vegetation.*

Did you identify and preserve natural infiltration capacity? If so, how? If not, why?

*The infiltration rates within the basin area range from 1.0 in/hr to 1.5 in/hr, which are less than the required 1.6 in/hr (without a safety factor) for infiltration based BMPs. However, the project site will utilize a bioretention basin which will provide opportunities for infiltration below the gravel layer. Additionally, the project is constructing an interim channel along the northerly project boundary for the offsite flows and treated onsite flows, which will incorporate a 2 foot berm at the downstream end. This berm will allow for 2 feet of ponding, in which the flows will infiltrate into natural soil.*

Did you identify and minimize impervious area? If so, how? If not, why?

*The project site will utilize the minimum impervious area necessary.*

Did you identify and disperse runoff to adjacent pervious areas? If so, how? If not, why?

*Roof areas will discharge to adjacent landscaping, where feasible, and the onsite flows will all discharge into the bioretention basin.*

# Section C: Delineate Drainage Management Areas (DMAs)

Utilizing the procedure in Section 3.3 of the WQMP Guidance Document which discusses the methods of delineating and mapping your project site into individual DMAs, complete Table C.1 below to appropriately categorize the types of classification (e.g., Type A, Type B, etc.) per DMA for your project site. Upon completion of this table, this information will then be used to populate and tabulate the corresponding tables for their respective DMA classifications.

**Table C.1** DMA Classifications

| DMA Name or ID | Surface Type(s)[1] | Area (Sq. Ft.) | DMA Type |
|---|---|---|---|
| DMA A | Roof, Asphalt/Concrete, Landscape | 1,000,573 | Type "D" |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

[1]*Reference Table 2-1 in the WQMP Guidance Document to populate this column*

**Table C.2** Type 'A', Self-Treating Areas

| DMA Name or ID | Area (Sq. Ft.) | Stabilization Type | Irrigation Type (if any) |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |

**Table C.3** Type 'B', Self-Retaining Areas

| **Self-Retaining Area** | | | | **Type 'C' DMAs that are draining to the Self-Retaining Area** | | |
|---|---|---|---|---|---|---|
| DMA Name/ ID | Post-project surface type | Area (square feet) [A] | Storm Depth (inches) [B] | DMA Name / ID | [C] from Table C.4 = [C] | Required Retention Depth (inches) [D] |
| | | | | | | |
| | | | | | | |
| | | | | | | |

$$[D] = [B] + \frac{[B] \cdot [C]}{[A]}$$

**Table C.4** Type 'C', Areas that Drain to Self-Retaining Areas

| DMA | | | | | Receiving Self-Retaining DMA | | |
|---|---|---|---|---|---|---|---|
| DMA Name/ ID | Area (square feet) | Post-project surface type | Runoff factor | Product | | Area (square feet) | Ratio |
| | [A] | | [B] | [C] = [A] x [B] | DMA name /ID | [D] | [C]/[D] |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

**Table C.5** Type 'D', Areas Draining to BMPs

| DMA Name or ID | BMP Name or ID |
|---|---|
| DMA A | Bioretention Basin A |
| | |
| | |
| | |
| | |

*Note: More than one drainage management area can drain to a single LID BMP, however, one drainage management area may not drain to more than one BMP.*

# Section D: Implement LID BMPs

## D.1 Infiltration Applicability

Is there an approved downstream 'Highest and Best Use' for stormwater runoff (see discussion in Chapter 2.4.4 of the WQMP Guidance Document for further details)? ☐ Y ☒ N

If yes has been checked, Infiltration BMPs shall not be used for the site. If no, continue working through this section to implement your LID BMPs. It is recommended that you contact your Co-Permittee to verify whether or not your project discharges to an approved downstream 'Highest and Best Use' feature.

### Geotechnical Report

A Geotechnical Report or Phase I Environmental Site Assessment may be required by the Copermittee to confirm present and past site characteristics that may affect the use of Infiltration BMPs. In addition, the Co-Permittee, at their discretion, may not require a geotechnical report for small projects as described in Chapter 2 of the WQMP Guidance Document. If a geotechnical report has been prepared, include it in Appendix 3. In addition, if a Phase I Environmental Site Assessment has been prepared, include it in Appendix 4.

Is this project classified as a small project consistent with the requirements of Chapter 2 of the WQMP Guidance Document? ☒ Y ☐ N

### Infiltration Feasibility

Table D.1 below is meant to provide a simple means of assessing which DMAs on your site support Infiltration BMPs and is discussed in the WQMP Guidance Document in Chapter 2.4.5. Check the appropriate box for each question and then list affected DMAs as applicable. If additional space is needed, add a row below the corresponding answer.

**Table D.1** Infiltration Feasibility

| Does the project site… | YES | NO |
|---|---|---|
| …have any DMAs with a seasonal high groundwater mark shallower than 10 feet? | | X |
| If Yes, list affected DMAs: | | |
| …have any DMAs located within 100 feet of a water supply well? | | X |
| If Yes, list affected DMAs: | | |
| …have any areas identified by the geotechnical report as posing a public safety risk where infiltration of stormwater could have a negative impact? | | X |
| If Yes, list affected DMAs: | | |
| …have measured in-situ infiltration rates of less than 1.6 inches / hour? | X | |
| If Yes, list affected DMAs: **A** | | |
| …have significant cut and/or fill conditions that would preclude in-situ testing of infiltration rates at the final infiltration surface? | | X |
| If Yes, list affected DMAs: | | |
| …geotechnical report identify other site-specific factors that would preclude effective and safe infiltration? | | X |
| Describe here: | | |

If you answered "Yes" to any of the questions above for any DMA, Infiltration BMPs should not be used for those DMAs and you should proceed to the assessment for Harvest and Use below.

## D.2 Harvest and Use Assessment

Please check what applies*:*

- ☐ Reclaimed water will be used for the non-potable water demands for the project.
- ☐ Downstream water rights may be impacted by Harvest and Use as approved by the Regional Board (verify with the Copermittee).
- ☐ The Design Capture Volume will be addressed using Infiltration Only BMPs. In such a case, Harvest and Use BMPs are still encouraged, but it would not be required if the Design Capture Volume will be infiltrated or evapotranspired.

If any of the above boxes have been checked, Harvest and Use BMPs need not be assessed for the site. If neither of the above criteria applies, follow the steps below to assess the feasibility of irrigation use, toilet use and other non-potable uses (e.g., industrial use).

### Irrigation Use Feasibility

Complete the following steps to determine the feasibility of harvesting stormwater runoff for Irrigation Use BMPs on your site:

Step 1: Identify the total area of irrigated landscape on the site, and the type of landscaping used.

*Total Area of Irrigated Landscape*: 9.74 acres

*Type of Landscaping (Conservation Design or Active Turf)*: Conservation Design

Step 2: Identify the planned total of all impervious areas on the proposed project from which runoff might be feasibly captured and stored for irrigation use. Depending on the configuration of buildings and other impervious areas on the site, you may consider the site as a whole, or parts of the site, to evaluate reasonable scenarios for capturing and storing runoff and directing the stored runoff to the potential use(s) identified in Step 1 above.

*Total Area of Impervious Surfaces:* 13.23 acres

Step 3: Cross reference the Design Storm depth for the project site (see Exhibit A of the WQMP Guidance Document) with the left column of Table 2-3 in Chapter 2 to determine the minimum area of Effective Irrigated Area per Tributary Impervious Area (EIATIA).

*Enter your EIATIA factor*: 1.21

Step 4: Multiply the unit value obtained from Step 3 by the total of impervious areas from Step 2 to develop the minimum irrigated area that would be required.

*Minimum required irrigated area*: 16.01 acres

Step 5: Determine if harvesting stormwater runoff for irrigation use is feasible for the project by comparing the total area of irrigated landscape (Step 1) to the minimum required irrigated area (Step 4).

| Minimum required irrigated area (Step 4) | Available Irrigated Landscape (Step 1) |
|---|---|
| 16.01 acres | 9.74 acres |

## Toilet Use Feasibility

Complete the following steps to determine the feasibility of harvesting stormwater runoff for toilet flushing uses on your site:

Step 1: Identify the projected total number of daily toilet users during the wet season, and account for any periodic shut downs or other lapses in occupancy:

*Projected Number of Daily Toilet Users: 604*

*Project Type: Residential*

Step 2: Identify the planned total of all impervious areas on the proposed project from which runoff might be feasibly captured and stored for toilet use. Depending on the configuration of buildings and other impervious areas on the site, you may consider the site as a whole, or parts of the site, to evaluate reasonable scenarios for capturing and storing runoff and directing the stored runoff to the potential use(s) identified in Step 1 above.

*Total Area of Impervious Surfaces: 13.23*

Step 3: Enter the Design Storm depth for the project site (see Exhibit A) into the left column of Table 2-1 in Chapter 2 to determine the minimum number or toilet users per tributary impervious acre (TUTIA).

*Enter your TUTIA factor: 113*

Step 4: Multiply the unit value obtained from Step 3 by the total of impervious areas from Step 2 to develop the minimum number of toilet users that would be required.

*Minimum number of toilet users: 1,495*

Step 5: Determine if harvesting stormwater runoff for toilet flushing use is feasible for the project by comparing the Number of Daily Toilet Users (Step 1) to the minimum required number of toilet users (Step 4).

| Minimum required Toilet Users (Step 4) | Projected number of toilet users (Step 1) |
|---|---|
| 1,495 | 604 |

## Other Non-Potable Use Feasibility

Are there other non-potable uses for stormwater runoff on the site (e.g. industrial use)? See Chapter 2 of the Guidance for further information. If yes, describe below. If no, write N/A.

N/A

Step 1: Identify the projected average daily non-potable demand, in gallons per day, during the wet season and accounting for any periodic shut downs or other lapses in occupancy or operation.

*Average Daily Demand:* N/A

Step 2: Identify the planned total of all impervious areas on the proposed project from which runoff might be feasibly captured and stored for the identified non-potable use. Depending on the configuration of buildings and other impervious areas on the site, you may consider the site as a whole, or parts of the site, to evaluate reasonable scenarios for capturing and storing runoff and directing the stored runoff to the potential use(s) identified in Step 1 above.

*Total Area of Impervious Surfaces:* N/A

Step 3: Enter the Design Storm depth for the project site (see Exhibit A) into the left column of Table 2-3 in Chapter 2 to determine the minimum demand for non-potable uses per tributary impervious acre.

*Enter the factor from Table 2-3:* N/A

Step 4: Multiply the unit value obtained from Step 4 by the total of impervious areas from Step 3 to develop the minimum number of gallons per day of non-potable use that would be required.

*Minimum required use:* N/A

Step 5: Determine if harvesting stormwater runoff for other non-potable use is feasible for the project by comparing the Number of Daily Toilet Users (Step 1) to the minimum required number of toilet users (Step 4).

| **Minimum required non-potable use (Step 4)** | **Projected average daily use (Step 1)** |
|---|---|
| N/A | N/A |

If Irrigation, Toilet and Other Use feasibility anticipated demands are less than the applicable minimum values, Harvest and Use BMPs are not required and you should proceed to utilize LID Bioretention and Biotreatment, unless a site-specific analysis has been completed that demonstrates technical infeasibility as noted in D.3 below.

Based upon the Harvest and Use Assessment, the project site does not have sufficient landscape area or sufficient toilet users to require the project to utilize Harvest and Use BMPs.

## D.3 Bioretention and Biotreatment Assessment

Other LID Bioretention and Biotreatment BMPs as described in Chapter 2.4.7 of the WQMP Guidance Document are feasible on nearly all development sites with sufficient advance planning.

*Select one of the following:*

☒ LID Bioretention/Biotreatment BMPs will be used for some or all DMAs of the project as noted below in Section D.4 (note the requirements of Section 3.4.2 in the WQMP Guidance Document).

☐ A site-specific analysis demonstrating the technical infeasibility of all LID BMPs has been performed and is included in Appendix 5. If you plan to submit an analysis demonstrating the technical infeasibility of LID BMPs, request a pre-submittal meeting with the Copermittee to discuss this option. Proceed to Section E to document your alternative compliance measures.

## D.4 Feasibility Assessment Summaries

From the Infiltration, Harvest and Use, Bioretention and Biotreatment Sections above, complete Table D.2 below to summarize which LID BMPs are technically feasible, and which are not, based upon the established hierarchy.

**Table D.2** LID Prioritization Summary Matrix

| DMA Name/ID | LID BMP Hierarchy | | | | No LID (Alternative Compliance) |
|---|---|---|---|---|---|
| | 1. Infiltration | 2. Harvest and use | 3. Bioretention | 4. Biotreatment | |
| A | ☐ | ☐ | ☒ | ☐ | ☐ |
| | ☐ | ☐ | ☐ | ☐ | ☐ |
| | ☐ | ☐ | ☐ | ☐ | ☐ |
| | ☐ | ☐ | ☐ | ☐ | ☐ |
| | ☐ | ☐ | ☐ | ☐ | ☐ |
| | ☐ | ☐ | ☐ | ☐ | ☐ |

For those DMAs where LID BMPs are not feasible, provide a brief narrative below summarizing why they are not feasible, include your technical infeasibility criteria in Appendix 5, and proceed to Section E below to document Alternative Compliance measures for those DMAs. Recall that each proposed DMA must pass through the LID BMP hierarchy before alternative compliance measures may be considered.

N/A

## D.5 LID BMP Sizing

Each LID BMP must be designed to ensure that the Design Capture Volume will be addressed by the selected BMPs. First**,** calculate the Design Capture Volume for each LID BMP using the $V_{BMP}$ worksheet in Appendix F of the LID BMP Design Handbook. Second**,** design the LID BMP to meet the required $V_{BMP}$ using a method approved by the Copermittee. Utilize the worksheets found in the LID BMP Design Handbook or consult with your Copermittee to assist you in correctly sizing your LID BMPs. Complete Table D.3 below to document the Design Capture Volume and the Proposed Volume for each LID BMP. Provide the completed design procedure sheets for each LID BMP in Appendix 6. You may add additional rows to the table below as needed.

**Table D.3** DCV Calculations for LID BMPs

| DMA Type/ID | DMA Area (square feet) | Post-Project Surface Type | Effective Impervious Fraction, $I_f$ | DMA Runoff Factor | DMA Areas x Runoff Factor | *Bioretention Basin A* | | |
|---|---|---|---|---|---|---|---|---|
| | [A] | | [B] | [C] | [A] x [C] | | | |
| ***A-1*** | *580332.456* | *Roofs* | *1.0* | *0.89* | *517656.6* | *Design Storm Depth (in)* | *Design Capture Volume,* $V_{BMP}$ *(cubic feet)* | *Proposed Volume on Plans (cubic feet)* |
| ***A-2*** | *420240.744* | *Ornamental Landscaping* | *0.10* | *0.11* | *46419* | | | |
| | | | | | | | | |
| | | | | | | | | |
| | 1000573.2 | | | | 564075.6 | 0.68 | 31964.3 | 69095.7 |

[B], [C] is obtained as described in Section 2.3.1 of the WQMP Guidance Document
[E] is obtained from Exhibit A in the WQMP Guidance Document
[G] is obtained from a design procedure sheet, such as in LID BMP Design Handbook and placed in Appendix 6

The proposed volume within the bioretention basin was determined by adding the volume within 0.5 feet of depth, the volume within the soil media, and the volume within the gravel layer using the following parameter:

Soil Media Bottom Area = 51,182 sq. ft.
Ponded Depth = 0.5 feet
Soil Media Depth = 1.5 feet
Soil Media Void Ratio = 0.3
Gravel (minimum) Depth = 1.0 feet
Gravel Void Ratio = 0.40

Using these parameters, the volume was calculated by the following:

(51,182 sq. ft. x 0.5 feet) + (51,182 sq. ft. x 1.5 feet x 0.3) + (51,182 sq. ft. x 1.0 feet x 0.40) = 69,096 cu. ft.

# Section E: Alternative Compliance (LID Waiver Program)

LID BMPs are expected to be feasible on virtually all projects. Where LID BMPs have been demonstrated to be infeasible as documented in Section D, other Treatment Control BMPs must be used (subject to LID waiver approval by the Copermittee). Check one of the following Boxes:

☒ LID Principles and LID BMPs have been incorporated into the site design to fully address all Drainage Management Areas. No alternative compliance measures are required for this project and thus this Section is not required to be completed.

- *Or* -

☐ The following Drainage Management Areas are unable to be addressed using LID BMPs. A site-specific analysis demonstrating technical infeasibility of LID BMPs has been approved by the Co-Permittee and included in Appendix 5. Additionally, no downstream regional and/or sub-regional LID BMPs exist or are available for use by the project. The following alternative compliance measures on the following pages are being implemented to ensure that any pollutant loads expected to be discharged by not incorporating LID BMPs, are fully mitigated.

N/A

# E.1 Identify Pollutants of Concern

Utilizing Table A.1 from Section A above which noted your project's receiving waters and their associated EPA approved 303(d) listed impairments, cross reference this information with that of your selected Priority Development Project Category in Table E.1 below. If the identified General Pollutant Categories are the same as those listed for your receiving waters, then these will be your Pollutants of Concern and the appropriate box or boxes will be checked on the last row. The purpose of this is to document compliance and to help you appropriately plan for mitigating your Pollutants of Concern in lieu of implementing LID BMPs.

**Table E.1** Potential Pollutants by Land Use Type

| Priority Development Project Categories and/or Project Features (check those that apply) | General Pollutant Categories | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Bacterial Indicators | Metals | Nutrients | Pesticides | Toxic Organic Compounds | Sediments | Trash & Debris | Oil & Grease |
| ☐ Detached Residential Development | P | N | P | P | N | P | P | P |
| ☐ Attached Residential Development | P | N | P | P | N | P | P | P[(2)] |
| ☐ Commercial/Industrial Development | P[(3)] | P | P[(1)] | P[(1)] | P[(5)] | P[(1)] | P | P |
| ☐ Automotive Repair Shops | N | P | N | N | P[(4, 5)] | N | P | P |
| ☐ Restaurants (>5,000 $ft^2$) | P | N | N | N | N | N | P | P |
| ☐ Hillside Development (>5,000 $ft^2$) | P | N | P | P | N | P | P | P |
| ☐ Parking Lots (>5,000 $ft^2$) | P[(6)] | P | P[(1)] | P[(1)] | P[(4)] | P[(1)] | P | P |
| ☐ Retail Gasoline Outlets | N | P | N | N | P | N | P | P |
| **Project Priority Pollutant(s) of Concern** | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ | ☐ |

*P = Potential*

*N = Not Potential*

*(1) A potential Pollutant if non-native landscaping exists or is proposed onsite; otherwise not expected*

*(2) A potential Pollutant if the project includes uncovered parking areas; otherwise not expected*

*(3) A potential Pollutant is land use involving animal waste*

*(4) Specifically petroleum hydrocarbons*

*(5) Specifically solvents*

*(6) Bacterial indicators are routinely detected in pavement runoff*

## E.2 Stormwater Credits

Projects that cannot implement LID BMPs but nevertheless implement smart growth principles are potentially eligible for Stormwater Credits. Utilize Table 3-8 within the WQMP Guidance Document to identify your Project Category and its associated Water Quality Credit. If not applicable, write N/A.

**Table E.2** Water Quality Credits

| Qualifying Project Categories | Credit Percentage[2] |
|---|---|
| | |
| | |
| | |
| *Total Credit Percentage*[1] | |

[1]*Cannot Exceed 50%*
[2]*Obtain corresponding data from Table 3-8 in the WQMP Guidance Document*

## E.3 Sizing Criteria

After you appropriately considered Stormwater Credits for your project, utilize Table E.3 below to appropriately size them to the DCV, or Design Flow Rate, as applicable. Please reference Chapter 3.5.2 of the WQMP Guidance Document for further information.

**Table E.3** Treatment Control BMP Sizing

| **DMA Type/ID** | **DMA Area (square feet)** | **Post-Project Surface Type** | **Effective Impervious Fraction, $I_f$** | **DMA Runoff Factor** | **DMA Area x Runoff Factor** | | ***Enter BMP Name / Identifier Here*** | | |
|---|---|---|---|---|---|---|---|---|---|
| | [A] | | [B] | [C] | [A] x [C] | | | | |
| | | | | | | *Design Storm Depth (in)* | *Minimum Design Capture Volume or Design Flow Rate (cubic feet or cfs)* | *Total Storm Water Credit % Reduction* | *Proposed Volume or Flow on Plans (cubic feet or cfs)* |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | $A_T$ = Σ[A] | | | | Σ= [D] | [E] | $[F] = \frac{[D]x[E]}{[G]}$ | [F] X (1-[H]) | [I] |

[B], [C] is obtained as described in Section 2.3.1 from the WQMP Guidance Document
[E] is obtained from Exhibit A in the WQMP Guidance Document
[G] is for Flow-Based Treatment Control BMPs [G] = 43,560, for Volume-Based Control Treatment BMPs, [G] = 12
[H] is from the Total Credit Percentage as Calculated from Table E.2 above
[I] as obtained from a design procedure sheet from the BMP manufacturer and should be included in Appendix 6

## E.4 Treatment Control BMP Selection

Treatment Control BMPs typically provide proprietary treatment mechanisms to treat potential pollutants in runoff, but do not sustain significant biological processes. Treatment Control BMPs must have a removal efficiency of a medium or high effectiveness as quantified below:

- **High**: equal to or greater than 80% removal efficiency
- **Medium**: between 40% and 80% removal efficiency

Such removal efficiency documentation (e.g., studies, reports, etc.) as further discussed in Chapter 3.5.2 of the WQMP Guidance Document, must be included in Appendix 6. In addition, ensure that proposed Treatment Control BMPs are properly identified on the WQMP Site Plan in Appendix 1.

**Table E.4** Treatment Control BMP Selection

| Selected Treatment Control BMP Name or ID[1] | Priority Pollutant(s) of Concern to Mitigate[2] | Removal Efficiency Percentage[3] |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

*[1] Treatment Control BMPs must not be constructed within Receiving Waters. In addition, a proposed Treatment Control BMP may be listed more than once if they possess more than one qualifying pollutant removal efficiency.*
*[2] Cross Reference Table E.1 above to populate this column.*
*[3] As documented in a Co-Permittee Approved Study and provided in Appendix 6.*

# Section F: Hydromodification

### F.1 Hydrologic Conditions of Concern (HCOC) Analysis

Once you have determined that the LID design is adequate to address water quality requirements, you will need to assess if the proposed LID Design may still create a HCOC. Review Chapters 2 and 3 (including Figure 3-7) of the WQMP Guidance Document to determine if your project must mitigate for Hydromodification impacts. If your project meets one of the following criteria which will be indicated by the check boxes below, you do not need to address Hydromodification at this time. However, if the project does not qualify for Exemptions 1, 2 or 3, then additional measures must be added to the design to comply with HCOC criteria. This is discussed in further detail below in Section F.2.

**HCOC EXEMPTION 1**: The Priority Development Project disturbs less than one acre. The Copermittee has the discretion to require a Project-Specific WQMP to address HCOCs on projects less than one acre on a case by case basis. The disturbed area calculation should include all disturbances associated with larger common plans of development.

Does the project qualify for this HCOC Exemption? ☐ Y ☒ N

If Yes, HCOC criteria do not apply.

**HCOC EXEMPTION 2**: The volume and time of concentration[1] of storm water runoff for the post-development condition is not significantly different from the pre-development condition for a 2-year return frequency storm (a difference of 5% or less is considered insignificant) using one of the following methods to calculate:

- Riverside County Hydrology Manual
- Technical Release 55 (TR-55): Urban Hydrology for Small Watersheds (NRCS 1986), or derivatives thereof, such as the Santa Barbara Urban Hydrograph Method
- Other methods acceptable to the Co-Permittee

Does the project qualify for this HCOC Exemption? ☐ Y ☒ N

If Yes, report results in Table F.1 below and provide your substantiated hydrologic analysis in Appendix 7.

**Table F.1** Hydrologic Conditions of Concern Summary

| | **2 year – 24 hour** | | |
|---|---|---|---|
| | **Pre-condition** | **Post-condition** | **% Difference** |
| **Time of Concentration** | N/A | N/A | N/A |
| **Volume (Cubic Feet)** | N/A | N/A | N/A |

[1] Time of concentration is defined as the time after the beginning of the rainfall when all portions of the drainage basin are contributing to flow at the outlet.

**HCOC EXEMPTION 3**: All downstream conveyance channels to an adequate sump (for example, Prado Dam, Lake Elsinore, Canyon Lake, Santa Ana River, or other lake, reservoir or naturally erosion resistant feature) that will receive runoff from the project are engineered and regularly maintained to ensure design flow capacity; no sensitive stream habitat areas will be adversely affected; or are not identified on the Co-Permittees Hydromodification Sensitivity Maps.

Does the project qualify for this HCOC Exemption? ☐ Y ☒ N

If Yes, HCOC criteria do not apply and note below which adequate sump applies to this HCOC qualifier:

N/A

## F.2 HCOC Mitigation

If none of the above HCOC Exemption Criteria are applicable, HCOC criteria is considered mitigated if they meet one of the following conditions:

a. Additional LID BMPS are implemented onsite or offsite to mitigate potential erosion or habitat impacts as a result of HCOCs. This can be conducted by an evaluation of site-specific conditions utilizing accepted professional methodologies published by entities such as the California Stormwater Quality Association (CASQA), the Southern California Coastal Water Research Project (SCCRWP), or other Co-Permittee approved methodologies for site-specific HCOC analysis.

b. The project is developed consistent with an approved Watershed Action Plan that addresses HCOC in Receiving Waters.

c. Mimicking the pre-development hydrograph with the post-development hydrograph, for a 2-year return frequency storm. Generally, the hydrologic conditions of concern are not significant, if the post-development hydrograph is no more than 10% greater than pre-development hydrograph. In cases where excess volume cannot be infiltrated or captured and reused, discharge from the site must be limited to a flow rate no greater than 110% of the pre-development 2-year peak flow.

Be sure to include all pertinent documentation used in your analysis of the items a, b or c in Appendix 7.

Pre-project and post-project unit hydrographs were performed for the onsite area tributary to the Bioretention Basin. Basin routing analyses were then performed for the basin outlet structure, not accounting for the first 0.5 feet within the basin, which must infiltrate through the soil to address water quality. The basin routing calculations begin at elevation 1529.50, and the top of the soil media is at elevation 1529.00. Based upon the basin routing analyses, the basin will adequately reduce the post-project flow rate from 3.00 $ft^3/s$ to 0.27 $ft^3/s$. The pre-project condition flow rate is 0.53 $ft^3/s$, therefore the project adequately addresses the hydrologic conditions of concern.

# Section G: Source Control BMPs

Source control BMPs include permanent, structural features that may be required in your project plans — such as roofs over and berms around trash and recycling areas — and Operational BMPs, such as regular sweeping and "housekeeping", that must be implemented by the site's occupant or user. The MEP standard typically requires both types of BMPs. In general, Operational BMPs cannot be substituted for a feasible and effective permanent BMP. Using the Pollutant Sources/Source Control Checklist in Appendix 8, review the following procedure to specify Source Control BMPs for your site:

1. ***Identify Pollutant Sources*:** Review Column 1 in the Pollutant Sources/Source Control Checklist. Check off the potential sources of Pollutants that apply to your site.

2. ***Note Locations on Project-Specific WQMP Exhibit*:** Note the corresponding requirements listed in Column 2 of the Pollutant Sources/Source Control Checklist. Show the location of each Pollutant source and each permanent Source Control BMP in your Project-Specific WQMP Exhibit located in Appendix 1.

3. ***Prepare a Table and Narrative*:** Check off the corresponding requirements listed in Column 3 in the Pollutant Sources/Source Control Checklist. In the left column of Table G.1 below, list each potential source of runoff Pollutants on your site (from those that you checked in the Pollutant Sources/Source Control Checklist). In the middle column, list the corresponding permanent, Structural Source Control BMPs (from Columns 2 and 3 of the Pollutant Sources/Source Control Checklist) used to prevent Pollutants from entering runoff. **Add additional narrative** in this column that explains any special features, materials or methods of construction that will be used to implement these permanent, Structural Source Control BMPs.

4. ***Identify Operational Source Control BMPs:*** To complete your table, refer once again to the Pollutant Sources/Source Control Checklist. List in the right column of your table the Operational BMPs that should be implemented as long as the anticipated activities continue at the site. Copermittee stormwater ordinances require that applicable Source Control BMPs be implemented; the same BMPs may also be required as a condition of a use permit or other revocable Discretionary Approval for use of the site.

**Table G.1** Permanent and Operational Source Control Measures

| Potential Sources of Runoff pollutants | Permanent Structural Source Control BMPs | Operational Source Control BMPs |
|---|---|---|
| A. On-site storm drain inlets | • Mark all inlets with the words "Only Rain Down the Storm Drain" or similar. Catch Basin Markers may be available from Riverside County Flood Control and Water Conservation District, call 951.955.1200 to verify.<br>• Include Catch Basin Filter Inserts in all inlets/catch basins onsite as a pre-treatment measure. | • Maintain and periodically repaint or replace inlet markings.<br>• Provide Stormwater pollution prevention information to new site owners, lessees, or operators.<br>• See applicable operational BMPs in Fact Sheet SC-44, "Drainage System Maintenance," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com<br>• Include the following in lease agreements: "Tenants shall not allow anyone to discharge anything to storm drains or to store or deposit materials so as to create a potential discharge to storm drains. |
| D1. Need for future indoor & structural pest control | • Use building design features that discourage entry of pests. | • Provide Integrated Pest Management Information to owners, operators, tenants, and employees. |
| D2. Landscape/Outdoor Pesticide Use | • Design landscaping to minimize irrigation runoff, to promote surface infiltration where appropriate, and to minimize the use of fertilizers and pesticides that can contribute to stormwater pollution.<br>• Where landscaped areas are used to retain or detain stormwater, specify plans that are tolerant of saturated soil conditions.<br>• Consider using pest-resistant plans, especially adjacent to hardscape.<br>• To insure successful establishment, select plants appropriate to site soils, slopes, climate, sun, wind, rain, landuse, air movement, ecological consistency, and plant interactions.<br>• Irrigation runoff is prohibited. | • Maintain landscaping using minimum or no pesticides.<br>• See applicable operational BMPs in "What you should know for….Landscaping and Gardening" at http://rcflood.org/stormwater<br>• Provide Integrated Pest Management information to new owners, operators, tenants, and employees. |

| Potential Sources of Runoff Pollutants | Structural Source Control BMPs | Operational Source Control BMPs |
|---|---|---|
| F. Refuse areas | • Trash receptacles will be covered or closed at all times.<br>• Signs will be posted on or near dumpsters with the words "Do not dump hazardous materials here" or similar. | • Provide adequate number of receptacles. Inspect receptacles regularly; repair or replace leaky receptacles. Keep receptacles covered. Prohibit/prevent dumping of liquid or hazardous wastes. Post "no hazardous materials" signs. Inspect and pick up litter daily and clean up spills immediately. Keep spill control materials available on-site. See Fact Sheet SC-34, "Waste Handling and Disposal" in the CASQA Stormwater Quality Handbooks at www.cabmphandbook.com |
| N. Fire Sprinkler Test Water | • Provide a means to drain fire sprinkler test water to the sanitary sewer | • See the note in Fact Sheet SC-41, "Building and Grounds Maintenance," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com |
| O. Roofing, gutters, and trim | • Avoid roofing, gutters, and trim made of copper or other unprotected metals that may leach into runoff. | • Inspect and maintain drains to prevent blockages and overflow. |
| P. Sidewalks | | • Sweep sidewalks regularly to prevent accumulation of litter and debris. Collect debris from pressure washing to prevent entry into storm drain system. |
| Vehicular Restrictions | | • Restrict vehicular onsite power washes<br>• Restrict vehicular onsite maintenance and repairs |

# Section H: Construction Plan Checklist

Populate Table H.1 below to assist the plan checker in an expeditious review of your project. The first two columns will contain information that was prepared in previous steps, while the last column will be populated with the corresponding plan sheets. This table is to be completed with the submittal of your final Project-Specific WQMP.

**Table H.1** Construction Plan Cross-reference

| BMP No. or ID | BMP Identifier and Description | Corresponding Plan Sheet(s) |
|---|---|---|
| A | Bioretention Basin A | Figure 3 – WQMP Site Plan |
| | | |
| | | |
| | | |
| | | |

Note that the updated table — or Construction Plan WQMP Checklist — is **only a reference tool** to facilitate an easy comparison of the construction plans to your Project-Specific WQMP. Co-Permittee staff can advise you regarding the process required to propose changes to the approved Project-Specific WQMP.

# Section I: Operation, Maintenance and Funding

The Copermittee will periodically verify that Stormwater BMPs on your site are maintained and continue to operate as designed. To make this possible, your Copermittee will require that you include in Appendix 9 of this Project-Specific WQMP:

1. A means to finance and implement facility maintenance in perpetuity, including replacement cost.
2. Acceptance of responsibility for maintenance from the time the BMPs are constructed until responsibility for operation and maintenance is legally transferred. A warranty covering a period following construction may also be required.
3. An outline of general maintenance requirements for the Stormwater BMPs you have selected.
4. Figures delineating and designating pervious and impervious areas, location, and type of Stormwater BMP, and tables of pervious and impervious areas served by each facility. Geo-locating the BMPs using a coordinate system of latitude and longitude is recommended to help facilitate a future statewide database system.
5. A separate list and location of self-retaining areas or areas addressed by LID Principles that do not require specialized O&M or inspections but will require typical landscape maintenance as noted in Chapter 5, pages 85-86, in the WQMP Guidance. Include a brief description of typical landscape maintenance for these areas.

Your local Co-Permittee will also require that you prepare and submit a detailed Stormwater BMP Operation and Maintenance Plan that sets forth a maintenance schedule for each of the Stormwater BMPs built on your site. An agreement assigning responsibility for maintenance and providing for inspections and certification may also be required.

Details of these requirements and instructions for preparing a Stormwater BMP Operation and Maintenance Plan are in Chapter 5 of the WQMP Guidance Document.

**Maintenance Mechanism:** Valley Wide or County CFD

Will the proposed BMPs be maintained by a Home Owners' Association (HOA) or Property Owners Association (POA)?

☐ Y ☒ N

Include your Operation and Maintenance Plan and Maintenance Mechanism in Appendix 9. Additionally, include all pertinent forms of educational materials for those personnel that will be maintaining the proposed BMPs within this Project-Specific WQMP in Appendix 10.

# Appendix 1: Maps and Site Plans

*Location Map, WQMP Site Plan and Receiving Waters Map*

## *FIGURE 1 – Vicinity Map*




# HEMET 30
# VICINITY MAP

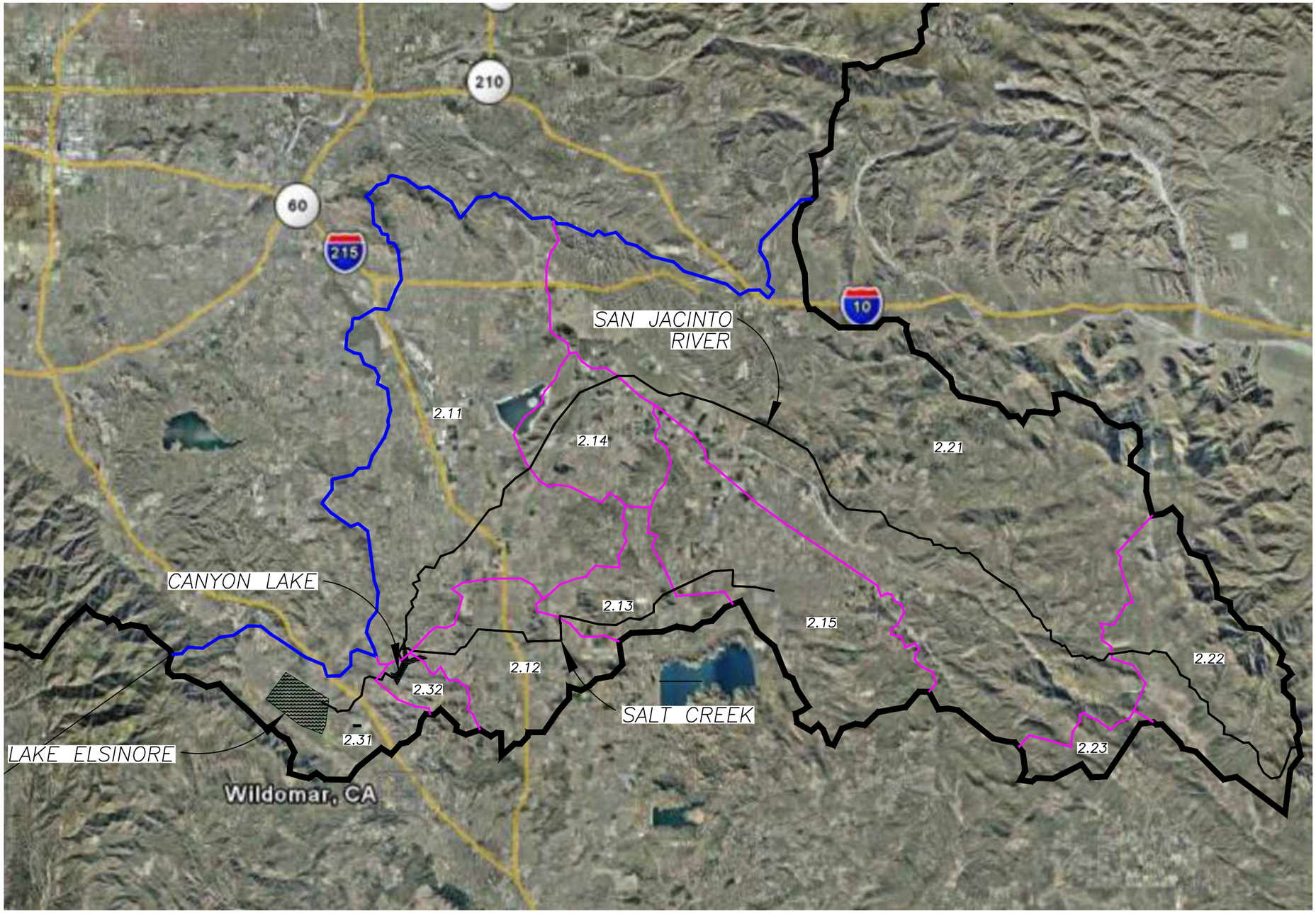
N

JLC Engineering & Consulting, Inc.
41660 IVY STREET, SUITE A
MURRIETA, CA 92562
PH. 951.304.9552 FAX 951.304.3568

FIGURE 1

Drawing Name: C:\Users\jcarver\Documents\Drawing1.dwg
Last Opened: Mar 09, 2021 – 3:11pm by jcarver

## *Figure 2 – Receiving Waters Map*




LEGEND

- Regional Boundary
- Hydrologic Unit Boundary (HU)
- Hydrologic Subarea Boundary (SA)
- FLOW PATH

# HEMET 30 RECEIVING WATERS MAP
# SAN JACINTO WATERSHED

N

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FIGURE 2

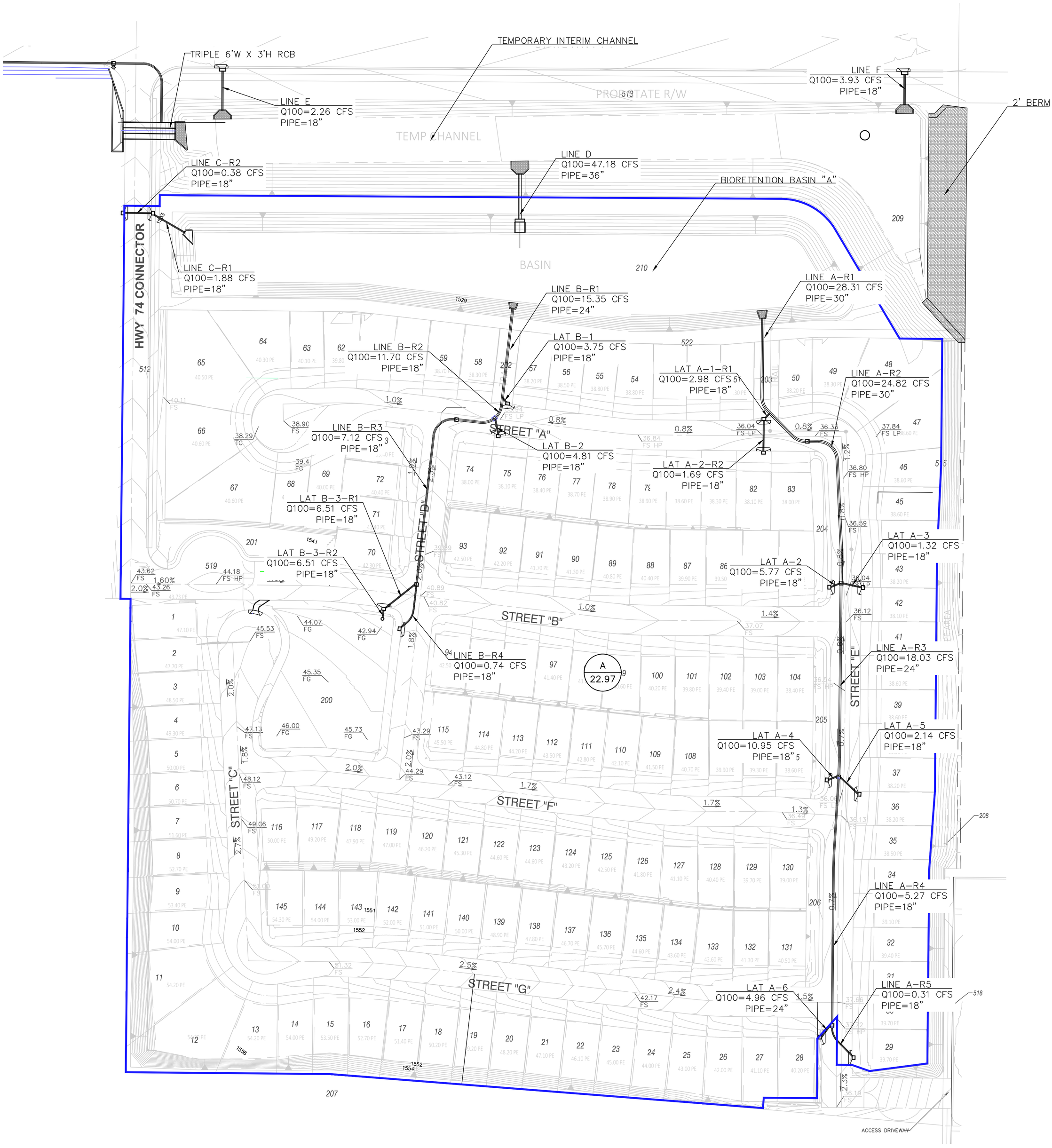
Drawing Name: O:\150.10.19\Engineering\WQMP\Appendix 1 - Maps & Site Plan\Receiving waters-San Jacinto.dwg
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*Figure 3 – WQMP Site Plan*

# HEMET 30

COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

# WQMP SITE PLAN







## BIORETENTION BASIN TYPICAL SECTION

NTS




# EXHIBIT "X"

## HEMET 30

## DRAINAGE FACILITIES MAP


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# Appendix 2:  Construction Plans

*Grading and Drainage Plans*

# Appendix 3: Soils Information

*Geotechnical Study and Other Infiltration Testing Data*

## Joe Castaneda

**From:** Luke Weidman <Weidman@geoconinc.com>
**Sent:** Thursday, November 19, 2020 4:33 PM
**To:** Joe Castaneda
**Cc:** Lisa Battiato
**Subject:** Hemet 30 (Rivani)
**Attachments:** Hemet 30 (Rivani) Perc Location Map.pdf

Hello Joe,

We have preliminary infiltration rates from the percolation tests performed on site. The rates are listed below and the test location map is attached.

| Test Hole | Rate (in/hr) |
|---|---|
| P-1 | 0.8 |
| P-2 | 0.9 |
| P-3 | 1.5 |
| P-4 | 1.0 |
| P-5 | 1.4 |
| P-6 | 1.4 |
| P-7 | 1.1 |
| P-8 | 1.0 |
| P-9 | 1.5 |

Please let me know if you have any questions or concerns.

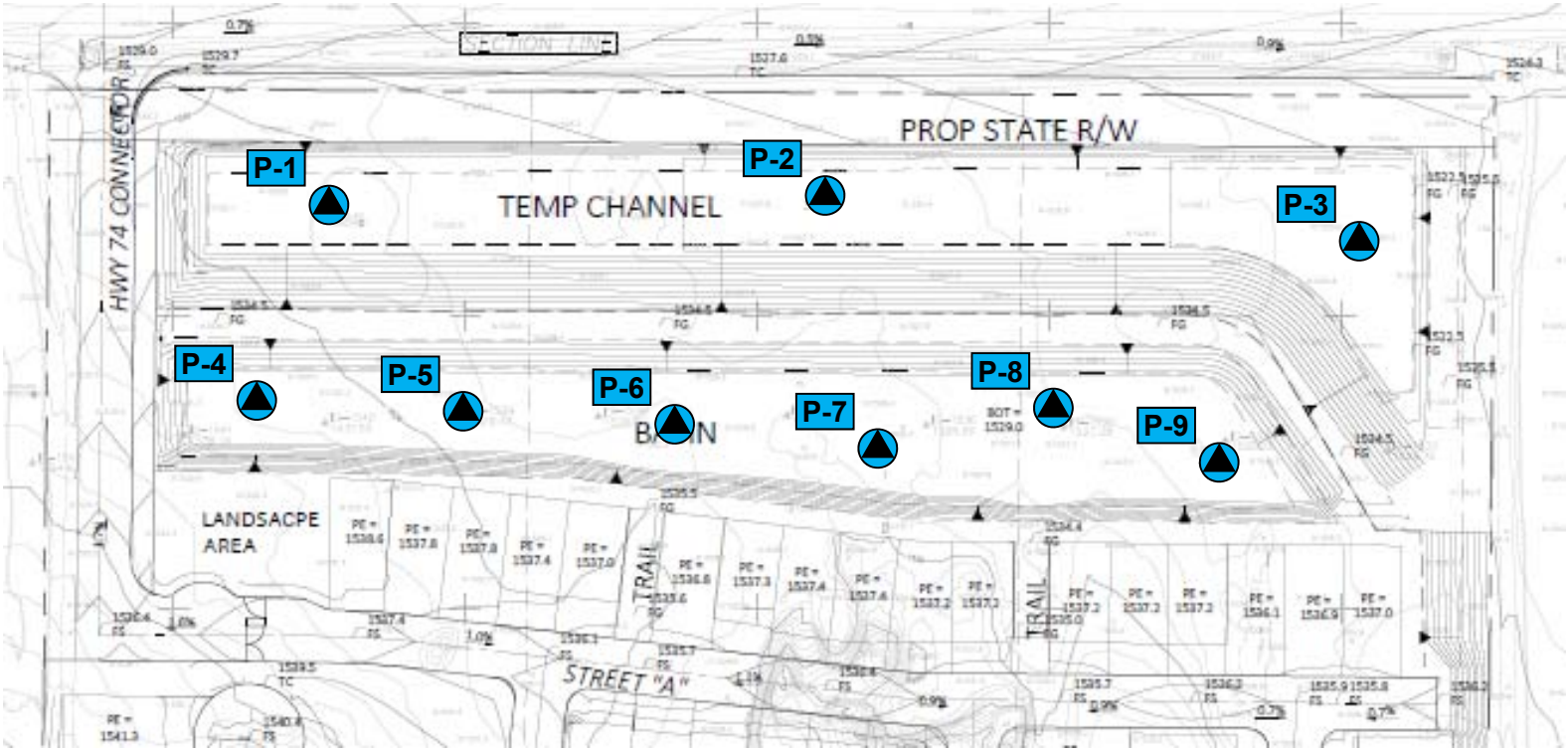
Many thanks,

**Luke Weidman** | *Staff Geologist*
**Geocon West, Inc.**
41571 Corning Place Suite 101, Murrieta, CA 92562-7065
Tel 951.304.2300 Ext. 705 Fax 951.304.2392

Visit our website at **www.geoconinc.com**

***Riverside County / La Quinta / Orange County / San Diego / Los Angeles / Bakersfield / Bay Area / Fairfield / Sacramento***

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P-9 ..... PERCOLATION TEST LOCATION

# Appendix 4:  Historical Site Conditions

*Phase I Environmental Site Assessment or Other Information on Past Site Use*

# Appendix 5: LID Infeasibility

*LID Technical Infeasibility Analysis*

# Appendix 6: BMP Design Details

*BMP Sizing, Design Details and other Supporting Documentation*

## *85TH PERCENTILE 24-HOUR RAINFALL MAP*

R 07 W | R 06 W | R 05 W | R 04 W | R 03 W | R 02 W | R 01 W | R 01 E | R 02 E | R 03 E | R 04 E | R 05 E

T 01 S | T 02 S | T 03 S | T 04 S | T 05 S | T 06 S | T 07 S | T 08 S

0.85 MiraLoma
0.61 RiversideNorth
0.68 PigeonPass
0.54 RiversideSouth
0.66 MorenoEast
0.85 Beaumont
0.88 PradoDam
0.51 Woodcrest
0.50 LakeMathews
0.68 PerrisReservoir
0.87 VistaGrandeGS
0.70 SanJacintoNWS
1.18 Idyllwild
0.58 SunCity
0.68 Winchester
0.70 ElsinoreNWS
1.11 ElCarisoStation
0.90 HurkeyCreek
0.77 WildomarLaCresta
0.52 SkinnerLake
0.65 Anza
0.77 SantaRosaPlateau
1.00 TemeculaNWS
0.64 AguangaValley

Santa Ana River Watershed

Santa Margarita Watershed

| | | | | | |
|---|---|---|---|---|---|
| 06 | 05 | 04 | 03 | 02 | 01 |
| 07 | 08 | 09 | 10 | 11 | 12 |
| 18 | 17 | 16 | 15 | 14 | 13 |
| 19 | 20 | 21 | 22 | 23 | 24 |
| 30 | 29 | 28 | 27 | 26 | 25 |
| 31 | 32 | 33 | 34 | 35 | 36 |

N

Rain Gage Locations

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

# Isohyetal Map for the 85th Percentile 24 hour Storm Event

July 2011

## *DESIGN VOLUME SPREADSHEET*

## Santa Ana Watershed - BMP Design Volume, $V_{BMP}$

(Rev. 10-2011)

Legend: Required Entries; Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

| | | | |
|---|---|---|---|
| Company Name | JLC Engineering and Consulting, Inc. | Date | |
| Designed by | Jilleen Ferris | Case No | |
| Company Project Number/Name | | | |

### BMP Identification

BMP NAME / ID: DMA A

*Must match Name/ID used on BMP Design Calculation Sheet*

### Design Rainfall Depth

85th Percentile, 24-hour Rainfall Depth, from the Isohyetal Map in Handbook Appendix E

$D_{85}$= 0.68 inches

### Drainage Management Area Tabulation

*Insert additional rows if needed to accommodate all DMAs draining to the BMP*

| DMA Type/ID | DMA Area (square feet) | Post-Project Surface Type | Effective Imperivous Fraction, $I_f$ | DMA Runoff Factor | DMA Areas x Runoff Factor | *Design Storm Depth (in)* | *Design Capture Volume, $V_{BMP}$ (cubic feet)* | *Proposed Volume on Plans (cubic feet)* |
|---|---|---|---|---|---|---|---|---|
| *A-1* | *580332.456* | *Roofs* | *1* | *0.89* | *517656.6* | | | |
| *A-2* | *420240.744* | *Ornamental Landscaping* | *0.1* | *0.11* | *46419* | | | |
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| | | | | | | | | |
| | **1000573.2** | | ***Total*** | | **564075.6** | **0.68** | ***31964.3*** | ***69095.7*** |

Notes:

## *BIORETENTION BASIN DESIGN SPREADSHEET*

| Bioretention Facility - Design Procedure | BMP ID: A | Legend: | Required Entries / Calculated Cells |
|---|---|---|---|

| | | | |
|---|---|---|---|
| Company Name: | JLC Engineering and Consulting, Inc. | Date: | 12/22/2020 |
| Designed by: | Jilleen Ferris | County/City Case No.: | Hemet 30 |

## Design Volume

| | | | |
|---|---|---|---|
| Enter the area tributary to this feature | $A_T$= | 22.97 | acres |
| Enter $V_{BMP}$ determined from Section 2.1 of this Handbook | $V_{BMP}$= | 31,965 | $ft^3$ |

## Type of Bioretention Facility Design

(●) Side slopes required (parallel to parking spaces or adjacent to walkways)

( ) No side slopes required (perpendicular to parking space or Planter Boxes)

## Bioretention Facility Surface Area

| | | | |
|---|---|---|---|
| Depth of Soil Filter Media Layer | $d_S$ = | 1.5 | ft |
| Top Width of Bioretention Facility, excluding curb | $w_T$ = | 96.0 | ft |
| Total Effective Depth, $d_E$<br>$d_E = (0.3) \times d_S + (0.4) \times 1 - (0.7/w_T) + 0.5$ | $d_E$ = | 1.34 | ft |
| Minimum Surface Area, $A_m$<br>$A_M\ (ft^2) = \frac{V_{BMP}\ (ft^3)}{d_E\ (ft)}$ | $A_M$ = | 23,807 | $ft^2$ |
| Proposed Surface Area | A= | 55,534 | $ft^2$ |

## Bioretention Facility Properties

| | | | |
|---|---|---|---|
| Side Slopes in Bioretention Facility | z = | 4 | :1 |
| Diameter of Underdrain | | 6 | inches |
| Longitudinal Slope of Site (3% maximum) | | 0.5 | % |
| 6" Check Dam Spacing | | 0 | feet |
| Describe Vegetation: | | | |

Notes:

# Appendix 7: Hydromodification

*Supporting Detail Relating to Hydrologic Conditions of Concern*

***PRE-PROJECT CONDITION UNIT HYDROGRAPH***
***2-YEAR, 24-HOUR STORM DURATION***

U n i t  H y d r o g r a p h  A n a l y s i s

Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2002, Version 6.1
Study date 10/23/21 File: ARA1PRE242.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

TRI-8 Builders - S/N 615

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English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

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150.10.18
UNIT HYDROGRAPH FOR BASIN NODE 118.1
PRE-PROJECT CONDITION
FN: ARA1PRE.UNRIV
---

Drainage Area = 22.97(Ac.) = 0.036 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 22.97(Ac.) = 0.036 Sq. Mi.
Length along longest watercourse = 1744.00(Ft.)
Length along longest watercourse measured to centroid = 446.00(Ft.)
Length along longest watercourse = 0.330 Mi.
Length along longest watercourse measured to centroid = 0.084 Mi.
Difference in elevation = 40.50(Ft.)
Slope along watercourse = 122.6147 Ft./Mi.
Average Manning's 'N' = 0.030
Lag time = 0.074 Hr.
Lag time = 4.45 Min.
25% of lag time = 1.11 Min.
40% of lag time = 1.78 Min.
Unit time = 5.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

| Area(Ac.)[1] | Rainfall(In)[2] | Weighting[1*2] |
|---|---|---|
| 22.97 | 1.70 | 39.05 |

100 YEAR Area rainfall data:

| Area(Ac.)[1] | Rainfall(In)[2] | Weighting[1*2] |
|---|---|---|
| 22.97 | 4.25 | 97.62 |

STORM EVENT (YEAR) = 2.00
Area Averaged 2-Year Rainfall = 1.700(In)
Area Averaged 100-Year Rainfall = 4.250(In)

Point rain (area averaged) = 1.700(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 1.700(In)

Sub-Area Data:

| Area(Ac.) | Runoff Index | Impervious % |
|---|---|---|
| 22.970 | 71.40 | 0.000 |

Total Area Entered = 22.97(Ac.)

| RI AMC2 | RI AMC-1 | Infil. Rate (In/Hr) | Impervious (Dec.%) | Adj. Infil. Rate (In/Hr) | Area% (Dec.) | F (In/Hr) |
|---|---|---|---|---|---|---|
| 71.4 | 52.7 | 0.545 | 0.000 | 0.545 | 1.000 | 0.545 |
| | | | | | Sum (F) = | 0.545 |

Area averaged mean soil loss (F) (In/Hr) = 0.545
Minimum soil loss rate ((In/Hr)) = 0.272
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.900

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U n i t H y d r o g r a p h
VALLEY S-Curve

---

Unit Hydrograph Data

| Unit time period (hrs) | | Time % of lag | Distribution Graph % | Unit Hydrograph (CFS) |
|---|---|---|---|---|
| 1 | 0.083 | 112.454 | 22.974 | 5.318 |
| 2 | 0.167 | 224.909 | 48.849 | 11.308 |
| 3 | 0.250 | 337.363 | 14.032 | 3.248 |
| 4 | 0.333 | 449.817 | 6.419 | 1.486 |
| 5 | 0.417 | 562.272 | 3.567 | 0.826 |
| 6 | 0.500 | 674.726 | 2.182 | 0.505 |
| 7 | 0.583 | 787.180 | 1.287 | 0.298 |
| 8 | 0.667 | 899.635 | 0.690 | 0.160 |
| | | | Sum = 100.000 | Sum= 23.149 |

---

| Unit Time (Hr.) | Pattern Percent | Storm Rain (In/Hr) | Loss rate(In./Hr) Max | Low | Effective (In/Hr) |
|---|---|---|---|---|---|
| 1 | 0.08 | 0.07 | 0.014 | 0.966 | 0.012 | 0.00 |
| 2 | 0.17 | 0.07 | 0.014 | 0.962 | 0.012 | 0.00 |
| 3 | 0.25 | 0.07 | 0.014 | 0.958 | 0.012 | 0.00 |
| 4 | 0.33 | 0.10 | 0.020 | 0.954 | 0.018 | 0.00 |
| 5 | 0.42 | 0.10 | 0.020 | 0.951 | 0.018 | 0.00 |
| 6 | 0.50 | 0.10 | 0.020 | 0.947 | 0.018 | 0.00 |
| 7 | 0.58 | 0.10 | 0.020 | 0.943 | 0.018 | 0.00 |
| 8 | 0.67 | 0.10 | 0.020 | 0.940 | 0.018 | 0.00 |
| 9 | 0.75 | 0.10 | 0.020 | 0.936 | 0.018 | 0.00 |
| 10 | 0.83 | 0.13 | 0.027 | 0.932 | 0.024 | 0.00 |
| 11 | 0.92 | 0.13 | 0.027 | 0.929 | 0.024 | 0.00 |
| 12 | 1.00 | 0.13 | 0.027 | 0.925 | 0.024 | 0.00 |
| 13 | 1.08 | 0.10 | 0.020 | 0.921 | 0.018 | 0.00 |
| 14 | 1.17 | 0.10 | 0.020 | 0.918 | 0.018 | 0.00 |
| 15 | 1.25 | 0.10 | 0.020 | 0.914 | 0.018 | 0.00 |
| 16 | 1.33 | 0.10 | 0.020 | 0.910 | 0.018 | 0.00 |
| 17 | 1.42 | 0.10 | 0.020 | 0.907 | 0.018 | 0.00 |
| 18 | 1.50 | 0.10 | 0.020 | 0.903 | 0.018 | 0.00 |
| 19 | 1.58 | 0.10 | 0.020 | 0.899 | 0.018 | 0.00 |
| 20 | 1.67 | 0.10 | 0.020 | 0.896 | 0.018 | 0.00 |
| 21 | 1.75 | 0.10 | 0.020 | 0.892 | 0.018 | 0.00 |
| 22 | 1.83 | 0.13 | 0.027 | 0.889 | 0.024 | 0.00 |
| 23 | 1.92 | 0.13 | 0.027 | 0.885 | 0.024 | 0.00 |
| 24 | 2.00 | 0.13 | 0.027 | 0.881 | 0.024 | 0.00 |
| 25 | 2.08 | 0.13 | 0.027 | 0.878 | 0.024 | 0.00 |
| 26 | 2.17 | 0.13 | 0.027 | 0.874 | 0.024 | 0.00 |
| 27 | 2.25 | 0.13 | 0.027 | 0.871 | 0.024 | 0.00 |
| 28 | 2.33 | 0.13 | 0.027 | 0.867 | 0.024 | 0.00 |
| 29 | 2.42 | 0.13 | 0.027 | 0.864 | 0.024 | 0.00 |
| 30 | 2.50 | 0.13 | 0.027 | 0.860 | 0.024 | 0.00 |
| 31 | 2.58 | 0.17 | 0.034 | 0.857 | 0.031 | 0.00 |
| 32 | 2.67 | 0.17 | 0.034 | 0.853 | 0.031 | 0.00 |
| 33 | 2.75 | 0.17 | 0.034 | 0.850 | 0.031 | 0.00 |
| 34 | 2.83 | 0.17 | 0.034 | 0.846 | 0.031 | 0.00 |
| 35 | 2.92 | 0.17 | 0.034 | 0.843 | 0.031 | 0.00 |
| 36 | 3.00 | 0.17 | 0.034 | 0.839 | 0.031 | 0.00 |
| 37 | 3.08 | 0.17 | 0.034 | 0.836 | 0.031 | 0.00 |
| 38 | 3.17 | 0.17 | 0.034 | 0.832 | 0.031 | 0.00 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 39 | 3.25 | 0.17 | 0.034 | 0.829 | 0.031 | 0.00 |
| 40 | 3.33 | 0.17 | 0.034 | 0.825 | 0.031 | 0.00 |
| 41 | 3.42 | 0.17 | 0.034 | 0.822 | 0.031 | 0.00 |
| 42 | 3.50 | 0.17 | 0.034 | 0.818 | 0.031 | 0.00 |
| 43 | 3.58 | 0.17 | 0.034 | 0.815 | 0.031 | 0.00 |
| 44 | 3.67 | 0.17 | 0.034 | 0.812 | 0.031 | 0.00 |
| 45 | 3.75 | 0.17 | 0.034 | 0.808 | 0.031 | 0.00 |
| 46 | 3.83 | 0.20 | 0.041 | 0.805 | 0.037 | 0.00 |
| 47 | 3.92 | 0.20 | 0.041 | 0.801 | 0.037 | 0.00 |
| 48 | 4.00 | 0.20 | 0.041 | 0.798 | 0.037 | 0.00 |
| 49 | 4.08 | 0.20 | 0.041 | 0.795 | 0.037 | 0.00 |
| 50 | 4.17 | 0.20 | 0.041 | 0.791 | 0.037 | 0.00 |
| 51 | 4.25 | 0.20 | 0.041 | 0.788 | 0.037 | 0.00 |
| 52 | 4.33 | 0.23 | 0.048 | 0.784 | 0.043 | 0.00 |
| 53 | 4.42 | 0.23 | 0.048 | 0.781 | 0.043 | 0.00 |
| 54 | 4.50 | 0.23 | 0.048 | 0.778 | 0.043 | 0.00 |
| 55 | 4.58 | 0.23 | 0.048 | 0.774 | 0.043 | 0.00 |
| 56 | 4.67 | 0.23 | 0.048 | 0.771 | 0.043 | 0.00 |
| 57 | 4.75 | 0.23 | 0.048 | 0.768 | 0.043 | 0.00 |
| 58 | 4.83 | 0.27 | 0.054 | 0.765 | 0.049 | 0.01 |
| 59 | 4.92 | 0.27 | 0.054 | 0.761 | 0.049 | 0.01 |
| 60 | 5.00 | 0.27 | 0.054 | 0.758 | 0.049 | 0.01 |
| 61 | 5.08 | 0.20 | 0.041 | 0.755 | 0.037 | 0.00 |
| 62 | 5.17 | 0.20 | 0.041 | 0.751 | 0.037 | 0.00 |
| 63 | 5.25 | 0.20 | 0.041 | 0.748 | 0.037 | 0.00 |
| 64 | 5.33 | 0.23 | 0.048 | 0.745 | 0.043 | 0.00 |
| 65 | 5.42 | 0.23 | 0.048 | 0.742 | 0.043 | 0.00 |
| 66 | 5.50 | 0.23 | 0.048 | 0.738 | 0.043 | 0.00 |
| 67 | 5.58 | 0.27 | 0.054 | 0.735 | 0.049 | 0.01 |
| 68 | 5.67 | 0.27 | 0.054 | 0.732 | 0.049 | 0.01 |
| 69 | 5.75 | 0.27 | 0.054 | 0.729 | 0.049 | 0.01 |
| 70 | 5.83 | 0.27 | 0.054 | 0.725 | 0.049 | 0.01 |
| 71 | 5.92 | 0.27 | 0.054 | 0.722 | 0.049 | 0.01 |
| 72 | 6.00 | 0.27 | 0.054 | 0.719 | 0.049 | 0.01 |
| 73 | 6.08 | 0.30 | 0.061 | 0.716 | 0.055 | 0.01 |
| 74 | 6.17 | 0.30 | 0.061 | 0.713 | 0.055 | 0.01 |
| 75 | 6.25 | 0.30 | 0.061 | 0.709 | 0.055 | 0.01 |
| 76 | 6.33 | 0.30 | 0.061 | 0.706 | 0.055 | 0.01 |
| 77 | 6.42 | 0.30 | 0.061 | 0.703 | 0.055 | 0.01 |
| 78 | 6.50 | 0.30 | 0.061 | 0.700 | 0.055 | 0.01 |
| 79 | 6.58 | 0.33 | 0.068 | 0.697 | 0.061 | 0.01 |
| 80 | 6.67 | 0.33 | 0.068 | 0.694 | 0.061 | 0.01 |
| 81 | 6.75 | 0.33 | 0.068 | 0.691 | 0.061 | 0.01 |
| 82 | 6.83 | 0.33 | 0.068 | 0.687 | 0.061 | 0.01 |
| 83 | 6.92 | 0.33 | 0.068 | 0.684 | 0.061 | 0.01 |
| 84 | 7.00 | 0.33 | 0.068 | 0.681 | 0.061 | 0.01 |
| 85 | 7.08 | 0.33 | 0.068 | 0.678 | 0.061 | 0.01 |
| 86 | 7.17 | 0.33 | 0.068 | 0.675 | 0.061 | 0.01 |
| 87 | 7.25 | 0.33 | 0.068 | 0.672 | 0.061 | 0.01 |
| 88 | 7.33 | 0.37 | 0.075 | 0.669 | 0.067 | 0.01 |
| 89 | 7.42 | 0.37 | 0.075 | 0.666 | 0.067 | 0.01 |
| 90 | 7.50 | 0.37 | 0.075 | 0.663 | 0.067 | 0.01 |
| 91 | 7.58 | 0.40 | 0.082 | 0.660 | 0.073 | 0.01 |
| 92 | 7.67 | 0.40 | 0.082 | 0.657 | 0.073 | 0.01 |
| 93 | 7.75 | 0.40 | 0.082 | 0.654 | 0.073 | 0.01 |
| 94 | 7.83 | 0.43 | 0.088 | 0.651 | 0.080 | 0.01 |
| 95 | 7.92 | 0.43 | 0.088 | 0.648 | 0.080 | 0.01 |
| 96 | 8.00 | 0.43 | 0.088 | 0.645 | 0.080 | 0.01 |
| 97 | 8.08 | 0.50 | 0.102 | 0.642 | 0.092 | 0.01 |
| 98 | 8.17 | 0.50 | 0.102 | 0.639 | 0.092 | 0.01 |
| 99 | 8.25 | 0.50 | 0.102 | 0.636 | 0.092 | 0.01 |
| 100 | 8.33 | 0.50 | 0.102 | 0.633 | 0.092 | 0.01 |
| 101 | 8.42 | 0.50 | 0.102 | 0.630 | 0.092 | 0.01 |
| 102 | 8.50 | 0.50 | 0.102 | 0.627 | 0.092 | 0.01 |
| 103 | 8.58 | 0.53 | 0.109 | 0.624 | 0.098 | 0.01 |
| 104 | 8.67 | 0.53 | 0.109 | 0.621 | 0.098 | 0.01 |
| 105 | 8.75 | 0.53 | 0.109 | 0.618 | 0.098 | 0.01 |
| 106 | 8.83 | 0.57 | 0.116 | 0.615 | 0.104 | 0.01 |
| 107 | 8.92 | 0.57 | 0.116 | 0.612 | 0.104 | 0.01 |
| 108 | 9.00 | 0.57 | 0.116 | 0.609 | 0.104 | 0.01 |
| 109 | 9.08 | 0.63 | 0.129 | 0.606 | 0.116 | 0.01 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 110 | 9.17 | 0.63 | 0.129 | 0.603 | 0.116 | 0.01 |
| 111 | 9.25 | 0.63 | 0.129 | 0.601 | 0.116 | 0.01 |
| 112 | 9.33 | 0.67 | 0.136 | 0.598 | 0.122 | 0.01 |
| 113 | 9.42 | 0.67 | 0.136 | 0.595 | 0.122 | 0.01 |
| 114 | 9.50 | 0.67 | 0.136 | 0.592 | 0.122 | 0.01 |
| 115 | 9.58 | 0.70 | 0.143 | 0.589 | 0.129 | 0.01 |
| 116 | 9.67 | 0.70 | 0.143 | 0.586 | 0.129 | 0.01 |
| 117 | 9.75 | 0.70 | 0.143 | 0.584 | 0.129 | 0.01 |
| 118 | 9.83 | 0.73 | 0.150 | 0.581 | 0.135 | 0.01 |
| 119 | 9.92 | 0.73 | 0.150 | 0.578 | 0.135 | 0.01 |
| 120 | 10.00 | 0.73 | 0.150 | 0.575 | 0.135 | 0.01 |
| 121 | 10.08 | 0.50 | 0.102 | 0.572 | 0.092 | 0.01 |
| 122 | 10.17 | 0.50 | 0.102 | 0.570 | 0.092 | 0.01 |
| 123 | 10.25 | 0.50 | 0.102 | 0.567 | 0.092 | 0.01 |
| 124 | 10.33 | 0.50 | 0.102 | 0.564 | 0.092 | 0.01 |
| 125 | 10.42 | 0.50 | 0.102 | 0.561 | 0.092 | 0.01 |
| 126 | 10.50 | 0.50 | 0.102 | 0.559 | 0.092 | 0.01 |
| 127 | 10.58 | 0.67 | 0.136 | 0.556 | 0.122 | 0.01 |
| 128 | 10.67 | 0.67 | 0.136 | 0.553 | 0.122 | 0.01 |
| 129 | 10.75 | 0.67 | 0.136 | 0.550 | 0.122 | 0.01 |
| 130 | 10.83 | 0.67 | 0.136 | 0.548 | 0.122 | 0.01 |
| 131 | 10.92 | 0.67 | 0.136 | 0.545 | 0.122 | 0.01 |
| 132 | 11.00 | 0.67 | 0.136 | 0.542 | 0.122 | 0.01 |
| 133 | 11.08 | 0.63 | 0.129 | 0.540 | 0.116 | 0.01 |
| 134 | 11.17 | 0.63 | 0.129 | 0.537 | 0.116 | 0.01 |
| 135 | 11.25 | 0.63 | 0.129 | 0.534 | 0.116 | 0.01 |
| 136 | 11.33 | 0.63 | 0.129 | 0.532 | 0.116 | 0.01 |
| 137 | 11.42 | 0.63 | 0.129 | 0.529 | 0.116 | 0.01 |
| 138 | 11.50 | 0.63 | 0.129 | 0.527 | 0.116 | 0.01 |
| 139 | 11.58 | 0.57 | 0.116 | 0.524 | 0.104 | 0.01 |
| 140 | 11.67 | 0.57 | 0.116 | 0.521 | 0.104 | 0.01 |
| 141 | 11.75 | 0.57 | 0.116 | 0.519 | 0.104 | 0.01 |
| 142 | 11.83 | 0.60 | 0.122 | 0.516 | 0.110 | 0.01 |
| 143 | 11.92 | 0.60 | 0.122 | 0.514 | 0.110 | 0.01 |
| 144 | 12.00 | 0.60 | 0.122 | 0.511 | 0.110 | 0.01 |
| 145 | 12.08 | 0.83 | 0.170 | 0.508 | 0.153 | 0.02 |
| 146 | 12.17 | 0.83 | 0.170 | 0.506 | 0.153 | 0.02 |
| 147 | 12.25 | 0.83 | 0.170 | 0.503 | 0.153 | 0.02 |
| 148 | 12.33 | 0.87 | 0.177 | 0.501 | 0.159 | 0.02 |
| 149 | 12.42 | 0.87 | 0.177 | 0.498 | 0.159 | 0.02 |
| 150 | 12.50 | 0.87 | 0.177 | 0.496 | 0.159 | 0.02 |
| 151 | 12.58 | 0.93 | 0.190 | 0.493 | 0.171 | 0.02 |
| 152 | 12.67 | 0.93 | 0.190 | 0.491 | 0.171 | 0.02 |
| 153 | 12.75 | 0.93 | 0.190 | 0.488 | 0.171 | 0.02 |
| 154 | 12.83 | 0.97 | 0.197 | 0.486 | 0.177 | 0.02 |
| 155 | 12.92 | 0.97 | 0.197 | 0.483 | 0.177 | 0.02 |
| 156 | 13.00 | 0.97 | 0.197 | 0.481 | 0.177 | 0.02 |
| 157 | 13.08 | 1.13 | 0.231 | 0.479 | 0.208 | 0.02 |
| 158 | 13.17 | 1.13 | 0.231 | 0.476 | 0.208 | 0.02 |
| 159 | 13.25 | 1.13 | 0.231 | 0.474 | 0.208 | 0.02 |
| 160 | 13.33 | 1.13 | 0.231 | 0.471 | 0.208 | 0.02 |
| 161 | 13.42 | 1.13 | 0.231 | 0.469 | 0.208 | 0.02 |
| 162 | 13.50 | 1.13 | 0.231 | 0.467 | 0.208 | 0.02 |
| 163 | 13.58 | 0.77 | 0.156 | 0.464 | 0.141 | 0.02 |
| 164 | 13.67 | 0.77 | 0.156 | 0.462 | 0.141 | 0.02 |
| 165 | 13.75 | 0.77 | 0.156 | 0.459 | 0.141 | 0.02 |
| 166 | 13.83 | 0.77 | 0.156 | 0.457 | 0.141 | 0.02 |
| 167 | 13.92 | 0.77 | 0.156 | 0.455 | 0.141 | 0.02 |
| 168 | 14.00 | 0.77 | 0.156 | 0.452 | 0.141 | 0.02 |
| 169 | 14.08 | 0.90 | 0.184 | 0.450 | 0.165 | 0.02 |
| 170 | 14.17 | 0.90 | 0.184 | 0.448 | 0.165 | 0.02 |
| 171 | 14.25 | 0.90 | 0.184 | 0.446 | 0.165 | 0.02 |
| 172 | 14.33 | 0.87 | 0.177 | 0.443 | 0.159 | 0.02 |
| 173 | 14.42 | 0.87 | 0.177 | 0.441 | 0.159 | 0.02 |
| 174 | 14.50 | 0.87 | 0.177 | 0.439 | 0.159 | 0.02 |
| 175 | 14.58 | 0.87 | 0.177 | 0.436 | 0.159 | 0.02 |
| 176 | 14.67 | 0.87 | 0.177 | 0.434 | 0.159 | 0.02 |
| 177 | 14.75 | 0.87 | 0.177 | 0.432 | 0.159 | 0.02 |
| 178 | 14.83 | 0.83 | 0.170 | 0.430 | 0.153 | 0.02 |
| 179 | 14.92 | 0.83 | 0.170 | 0.428 | 0.153 | 0.02 |
| 180 | 15.00 | 0.83 | 0.170 | 0.425 | 0.153 | 0.02 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 181 | 15.08 | 0.80 | 0.163 | 0.423 | 0.147 | 0.02 |
| 182 | 15.17 | 0.80 | 0.163 | 0.421 | 0.147 | 0.02 |
| 183 | 15.25 | 0.80 | 0.163 | 0.419 | 0.147 | 0.02 |
| 184 | 15.33 | 0.77 | 0.156 | 0.417 | 0.141 | 0.02 |
| 185 | 15.42 | 0.77 | 0.156 | 0.415 | 0.141 | 0.02 |
| 186 | 15.50 | 0.77 | 0.156 | 0.412 | 0.141 | 0.02 |
| 187 | 15.58 | 0.63 | 0.129 | 0.410 | 0.116 | 0.01 |
| 188 | 15.67 | 0.63 | 0.129 | 0.408 | 0.116 | 0.01 |
| 189 | 15.75 | 0.63 | 0.129 | 0.406 | 0.116 | 0.01 |
| 190 | 15.83 | 0.63 | 0.129 | 0.404 | 0.116 | 0.01 |
| 191 | 15.92 | 0.63 | 0.129 | 0.402 | 0.116 | 0.01 |
| 192 | 16.00 | 0.63 | 0.129 | 0.400 | 0.116 | 0.01 |
| 193 | 16.08 | 0.13 | 0.027 | 0.398 | 0.024 | 0.00 |
| 194 | 16.17 | 0.13 | 0.027 | 0.396 | 0.024 | 0.00 |
| 195 | 16.25 | 0.13 | 0.027 | 0.394 | 0.024 | 0.00 |
| 196 | 16.33 | 0.13 | 0.027 | 0.392 | 0.024 | 0.00 |
| 197 | 16.42 | 0.13 | 0.027 | 0.390 | 0.024 | 0.00 |
| 198 | 16.50 | 0.13 | 0.027 | 0.388 | 0.024 | 0.00 |
| 199 | 16.58 | 0.10 | 0.020 | 0.386 | 0.018 | 0.00 |
| 200 | 16.67 | 0.10 | 0.020 | 0.384 | 0.018 | 0.00 |
| 201 | 16.75 | 0.10 | 0.020 | 0.382 | 0.018 | 0.00 |
| 202 | 16.83 | 0.10 | 0.020 | 0.380 | 0.018 | 0.00 |
| 203 | 16.92 | 0.10 | 0.020 | 0.378 | 0.018 | 0.00 |
| 204 | 17.00 | 0.10 | 0.020 | 0.376 | 0.018 | 0.00 |
| 205 | 17.08 | 0.17 | 0.034 | 0.374 | 0.031 | 0.00 |
| 206 | 17.17 | 0.17 | 0.034 | 0.372 | 0.031 | 0.00 |
| 207 | 17.25 | 0.17 | 0.034 | 0.371 | 0.031 | 0.00 |
| 208 | 17.33 | 0.17 | 0.034 | 0.369 | 0.031 | 0.00 |
| 209 | 17.42 | 0.17 | 0.034 | 0.367 | 0.031 | 0.00 |
| 210 | 17.50 | 0.17 | 0.034 | 0.365 | 0.031 | 0.00 |
| 211 | 17.58 | 0.17 | 0.034 | 0.363 | 0.031 | 0.00 |
| 212 | 17.67 | 0.17 | 0.034 | 0.361 | 0.031 | 0.00 |
| 213 | 17.75 | 0.17 | 0.034 | 0.360 | 0.031 | 0.00 |
| 214 | 17.83 | 0.13 | 0.027 | 0.358 | 0.024 | 0.00 |
| 215 | 17.92 | 0.13 | 0.027 | 0.356 | 0.024 | 0.00 |
| 216 | 18.00 | 0.13 | 0.027 | 0.354 | 0.024 | 0.00 |
| 217 | 18.08 | 0.13 | 0.027 | 0.353 | 0.024 | 0.00 |
| 218 | 18.17 | 0.13 | 0.027 | 0.351 | 0.024 | 0.00 |
| 219 | 18.25 | 0.13 | 0.027 | 0.349 | 0.024 | 0.00 |
| 220 | 18.33 | 0.13 | 0.027 | 0.347 | 0.024 | 0.00 |
| 221 | 18.42 | 0.13 | 0.027 | 0.346 | 0.024 | 0.00 |
| 222 | 18.50 | 0.13 | 0.027 | 0.344 | 0.024 | 0.00 |
| 223 | 18.58 | 0.10 | 0.020 | 0.342 | 0.018 | 0.00 |
| 224 | 18.67 | 0.10 | 0.020 | 0.341 | 0.018 | 0.00 |
| 225 | 18.75 | 0.10 | 0.020 | 0.339 | 0.018 | 0.00 |
| 226 | 18.83 | 0.07 | 0.014 | 0.337 | 0.012 | 0.00 |
| 227 | 18.92 | 0.07 | 0.014 | 0.336 | 0.012 | 0.00 |
| 228 | 19.00 | 0.07 | 0.014 | 0.334 | 0.012 | 0.00 |
| 229 | 19.08 | 0.10 | 0.020 | 0.333 | 0.018 | 0.00 |
| 230 | 19.17 | 0.10 | 0.020 | 0.331 | 0.018 | 0.00 |
| 231 | 19.25 | 0.10 | 0.020 | 0.330 | 0.018 | 0.00 |
| 232 | 19.33 | 0.13 | 0.027 | 0.328 | 0.024 | 0.00 |
| 233 | 19.42 | 0.13 | 0.027 | 0.326 | 0.024 | 0.00 |
| 234 | 19.50 | 0.13 | 0.027 | 0.325 | 0.024 | 0.00 |
| 235 | 19.58 | 0.10 | 0.020 | 0.323 | 0.018 | 0.00 |
| 236 | 19.67 | 0.10 | 0.020 | 0.322 | 0.018 | 0.00 |
| 237 | 19.75 | 0.10 | 0.020 | 0.321 | 0.018 | 0.00 |
| 238 | 19.83 | 0.07 | 0.014 | 0.319 | 0.012 | 0.00 |
| 239 | 19.92 | 0.07 | 0.014 | 0.318 | 0.012 | 0.00 |
| 240 | 20.00 | 0.07 | 0.014 | 0.316 | 0.012 | 0.00 |
| 241 | 20.08 | 0.10 | 0.020 | 0.315 | 0.018 | 0.00 |
| 242 | 20.17 | 0.10 | 0.020 | 0.313 | 0.018 | 0.00 |
| 243 | 20.25 | 0.10 | 0.020 | 0.312 | 0.018 | 0.00 |
| 244 | 20.33 | 0.10 | 0.020 | 0.311 | 0.018 | 0.00 |
| 245 | 20.42 | 0.10 | 0.020 | 0.309 | 0.018 | 0.00 |
| 246 | 20.50 | 0.10 | 0.020 | 0.308 | 0.018 | 0.00 |
| 247 | 20.58 | 0.10 | 0.020 | 0.307 | 0.018 | 0.00 |
| 248 | 20.67 | 0.10 | 0.020 | 0.306 | 0.018 | 0.00 |
| 249 | 20.75 | 0.10 | 0.020 | 0.304 | 0.018 | 0.00 |
| 250 | 20.83 | 0.07 | 0.014 | 0.303 | 0.012 | 0.00 |
| 251 | 20.92 | 0.07 | 0.014 | 0.302 | 0.012 | 0.00 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 252 | 21.00 | 0.07 | 0.014 | 0.301 | 0.012 | 0.00 |
| 253 | 21.08 | 0.10 | 0.020 | 0.299 | 0.018 | 0.00 |
| 254 | 21.17 | 0.10 | 0.020 | 0.298 | 0.018 | 0.00 |
| 255 | 21.25 | 0.10 | 0.020 | 0.297 | 0.018 | 0.00 |
| 256 | 21.33 | 0.07 | 0.014 | 0.296 | 0.012 | 0.00 |
| 257 | 21.42 | 0.07 | 0.014 | 0.295 | 0.012 | 0.00 |
| 258 | 21.50 | 0.07 | 0.014 | 0.294 | 0.012 | 0.00 |
| 259 | 21.58 | 0.10 | 0.020 | 0.293 | 0.018 | 0.00 |
| 260 | 21.67 | 0.10 | 0.020 | 0.292 | 0.018 | 0.00 |
| 261 | 21.75 | 0.10 | 0.020 | 0.291 | 0.018 | 0.00 |
| 262 | 21.83 | 0.07 | 0.014 | 0.290 | 0.012 | 0.00 |
| 263 | 21.92 | 0.07 | 0.014 | 0.289 | 0.012 | 0.00 |
| 264 | 22.00 | 0.07 | 0.014 | 0.288 | 0.012 | 0.00 |
| 265 | 22.08 | 0.10 | 0.020 | 0.287 | 0.018 | 0.00 |
| 266 | 22.17 | 0.10 | 0.020 | 0.286 | 0.018 | 0.00 |
| 267 | 22.25 | 0.10 | 0.020 | 0.285 | 0.018 | 0.00 |
| 268 | 22.33 | 0.07 | 0.014 | 0.284 | 0.012 | 0.00 |
| 269 | 22.42 | 0.07 | 0.014 | 0.283 | 0.012 | 0.00 |
| 270 | 22.50 | 0.07 | 0.014 | 0.282 | 0.012 | 0.00 |
| 271 | 22.58 | 0.07 | 0.014 | 0.281 | 0.012 | 0.00 |
| 272 | 22.67 | 0.07 | 0.014 | 0.281 | 0.012 | 0.00 |
| 273 | 22.75 | 0.07 | 0.014 | 0.280 | 0.012 | 0.00 |
| 274 | 22.83 | 0.07 | 0.014 | 0.279 | 0.012 | 0.00 |
| 275 | 22.92 | 0.07 | 0.014 | 0.278 | 0.012 | 0.00 |
| 276 | 23.00 | 0.07 | 0.014 | 0.278 | 0.012 | 0.00 |
| 277 | 23.08 | 0.07 | 0.014 | 0.277 | 0.012 | 0.00 |
| 278 | 23.17 | 0.07 | 0.014 | 0.276 | 0.012 | 0.00 |
| 279 | 23.25 | 0.07 | 0.014 | 0.276 | 0.012 | 0.00 |
| 280 | 23.33 | 0.07 | 0.014 | 0.275 | 0.012 | 0.00 |
| 281 | 23.42 | 0.07 | 0.014 | 0.275 | 0.012 | 0.00 |
| 282 | 23.50 | 0.07 | 0.014 | 0.274 | 0.012 | 0.00 |
| 283 | 23.58 | 0.07 | 0.014 | 0.274 | 0.012 | 0.00 |
| 284 | 23.67 | 0.07 | 0.014 | 0.273 | 0.012 | 0.00 |
| 285 | 23.75 | 0.07 | 0.014 | 0.273 | 0.012 | 0.00 |
| 286 | 23.83 | 0.07 | 0.014 | 0.273 | 0.012 | 0.00 |
| 287 | 23.92 | 0.07 | 0.014 | 0.273 | 0.012 | 0.00 |
| 288 | 24.00 | 0.07 | 0.014 | 0.272 | 0.012 | 0.00 |
| Sum = | | 100.0 | | | Sum = | 2.0 |

Flood volume = Effective rainfall 0.17(In)
times area 23.0(Ac.)/[(In)/(Ft.)] = 0.3(Ac.Ft)
Total soil loss = 1.53(In)
Total soil loss = 2.929(Ac.Ft)
Total rainfall = 1.70(In)
Flood volume = 14174.2 Cubic Feet
Total soil loss = 127567.4 Cubic Feet

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Peak flow rate of this hydrograph = 0.534(CFS)

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24 - H O U R S T O R M
R u n o f f H y d r o g r a p h

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Hydrograph in 5 Minute intervals ((CFS))

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| Time(h+m) | Volume Ac.Ft | Q(CFS) | 0 | 2.5 | 5.0 | 7.5 | 10.0 |
|---|---|---|---|---|---|---|---|
| 0+ 5 | 0.0000 | 0.01 | Q | \| | \| | \| | \| |
| 0+10 | 0.0002 | 0.02 | Q | \| | \| | \| | \| |
| 0+15 | 0.0004 | 0.03 | Q | \| | \| | \| | \| |
| 0+20 | 0.0006 | 0.03 | Q | \| | \| | \| | \| |
| 0+25 | 0.0009 | 0.04 | Q | \| | \| | \| | \| |
| 0+30 | 0.0012 | 0.04 | Q | \| | \| | \| | \| |
| 0+35 | 0.0015 | 0.05 | Q | \| | \| | \| | \| |
| 0+40 | 0.0018 | 0.05 | Q | \| | \| | \| | \| |
| 0+45 | 0.0022 | 0.05 | Q | \| | \| | \| | \| |
| 0+50 | 0.0025 | 0.05 | Q | \| | \| | \| | \| |
| 0+55 | 0.0029 | 0.06 | Q | \| | \| | \| | \| |
| 1+ 0 | 0.0033 | 0.06 | Q | \| | \| | \| | \| |
| 1+ 5 | 0.0037 | 0.06 | Q | \| | \| | \| | \| |
| 1+10 | 0.0041 | 0.05 | Q | \| | \| | \| | \| |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1+15 | 0.0044 | 0.05 | Q | \| | \| | \| | \| |
| 1+20 | 0.0048 | 0.05 | Q | \| | \| | \| | \| |
| 1+25 | 0.0051 | 0.05 | Q | \| | \| | \| | \| |
| 1+30 | 0.0054 | 0.05 | Q | \| | \| | \| | \| |
| 1+35 | 0.0057 | 0.05 | Q | \| | \| | \| | \| |
| 1+40 | 0.0061 | 0.05 | Q | \| | \| | \| | \| |
| 1+45 | 0.0064 | 0.05 | Q | \| | \| | \| | \| |
| 1+50 | 0.0067 | 0.05 | Q | \| | \| | \| | \| |
| 1+55 | 0.0072 | 0.06 | Q | \| | \| | \| | \| |
| 2+ 0 | 0.0076 | 0.06 | Q | \| | \| | \| | \| |
| 2+ 5 | 0.0080 | 0.06 | Q | \| | \| | \| | \| |
| 2+10 | 0.0084 | 0.06 | QV | \| | \| | \| | \| |
| 2+15 | 0.0089 | 0.06 | QV | \| | \| | \| | \| |
| 2+20 | 0.0093 | 0.06 | QV | \| | \| | \| | \| |
| 2+25 | 0.0097 | 0.06 | QV | \| | \| | \| | \| |
| 2+30 | 0.0102 | 0.06 | QV | \| | \| | \| | \| |
| 2+35 | 0.0106 | 0.07 | QV | \| | \| | \| | \| |
| 2+40 | 0.0111 | 0.07 | QV | \| | \| | \| | \| |
| 2+45 | 0.0117 | 0.08 | QV | \| | \| | \| | \| |
| 2+50 | 0.0122 | 0.08 | QV | \| | \| | \| | \| |
| 2+55 | 0.0127 | 0.08 | QV | \| | \| | \| | \| |
| 3+ 0 | 0.0133 | 0.08 | QV | \| | \| | \| | \| |
| 3+ 5 | 0.0138 | 0.08 | QV | \| | \| | \| | \| |
| 3+10 | 0.0144 | 0.08 | QV | \| | \| | \| | \| |
| 3+15 | 0.0149 | 0.08 | QV | \| | \| | \| | \| |
| 3+20 | 0.0154 | 0.08 | QV | \| | \| | \| | \| |
| 3+25 | 0.0160 | 0.08 | QV | \| | \| | \| | \| |
| 3+30 | 0.0165 | 0.08 | Q V | \| | \| | \| | \| |
| 3+35 | 0.0171 | 0.08 | Q V | \| | \| | \| | \| |
| 3+40 | 0.0176 | 0.08 | Q V | \| | \| | \| | \| |
| 3+45 | 0.0181 | 0.08 | Q V | \| | \| | \| | \| |
| 3+50 | 0.0187 | 0.08 | Q V | \| | \| | \| | \| |
| 3+55 | 0.0193 | 0.09 | Q V | \| | \| | \| | \| |
| 4+ 0 | 0.0200 | 0.09 | Q V | \| | \| | \| | \| |
| 4+ 5 | 0.0206 | 0.09 | Q V | \| | \| | \| | \| |
| 4+10 | 0.0213 | 0.09 | Q V | \| | \| | \| | \| |
| 4+15 | 0.0219 | 0.09 | Q V | \| | \| | \| | \| |
| 4+20 | 0.0226 | 0.10 | Q V | \| | \| | \| | \| |
| 4+25 | 0.0233 | 0.11 | Q V | \| | \| | \| | \| |
| 4+30 | 0.0241 | 0.11 | Q V | \| | \| | \| | \| |
| 4+35 | 0.0248 | 0.11 | Q  V | \| | \| | \| | \| |
| 4+40 | 0.0256 | 0.11 | Q  V | \| | \| | \| | \| |
| 4+45 | 0.0263 | 0.11 | Q  V | \| | \| | \| | \| |
| 4+50 | 0.0271 | 0.11 | Q  V | \| | \| | \| | \| |
| 4+55 | 0.0279 | 0.12 | Q  V | \| | \| | \| | \| |
| 5+ 0 | 0.0288 | 0.12 | Q  V | \| | \| | \| | \| |
| 5+ 5 | 0.0296 | 0.12 | Q  V | \| | \| | \| | \| |
| 5+10 | 0.0303 | 0.10 | Q  V | \| | \| | \| | \| |
| 5+15 | 0.0310 | 0.10 | Q  V | \| | \| | \| | \| |
| 5+20 | 0.0317 | 0.10 | Q  V | \| | \| | \| | \| |
| 5+25 | 0.0324 | 0.11 | Q  V | \| | \| | \| | \| |
| 5+30 | 0.0332 | 0.11 | Q   V | \| | \| | \| | \| |
| 5+35 | 0.0339 | 0.11 | Q   V | \| | \| | \| | \| |
| 5+40 | 0.0348 | 0.12 | Q   V | \| | \| | \| | \| |
| 5+45 | 0.0356 | 0.12 | Q   V | \| | \| | \| | \| |
| 5+50 | 0.0365 | 0.12 | Q   V | \| | \| | \| | \| |
| 5+55 | 0.0373 | 0.13 | Q   V | \| | \| | \| | \| |
| 6+ 0 | 0.0382 | 0.13 | Q   V | \| | \| | \| | \| |
| 6+ 5 | 0.0391 | 0.13 | Q   V | \| | \| | \| | \| |
| 6+10 | 0.0400 | 0.14 | Q   V | \| | \| | \| | \| |
| 6+15 | 0.0410 | 0.14 | Q    V | \| | \| | \| | \| |
| 6+20 | 0.0420 | 0.14 | Q    V | \| | \| | \| | \| |
| 6+25 | 0.0429 | 0.14 | Q    V | \| | \| | \| | \| |
| 6+30 | 0.0439 | 0.14 | Q    V | \| | \| | \| | \| |
| 6+35 | 0.0449 | 0.15 | Q    V | \| | \| | \| | \| |
| 6+40 | 0.0460 | 0.15 | Q    V | \| | \| | \| | \| |
| 6+45 | 0.0470 | 0.16 | Q    V | \| | \| | \| | \| |
| 6+50 | 0.0481 | 0.16 | Q    V | \| | \| | \| | \| |
| 6+55 | 0.0492 | 0.16 | Q     V | \| | \| | \| | \| |
| 7+ 0 | 0.0503 | 0.16 | Q     V | \| | \| | \| | \| |
| 7+ 5 | 0.0514 | 0.16 | Q     V | \| | \| | \| | \| |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 7+10 | 0.0525 | 0.16 | Q | V | \| | \| | \| | \| |
| 7+15 | 0.0535 | 0.16 | Q | V | \| | \| | \| | \| |
| 7+20 | 0.0546 | 0.16 | Q | V | \| | \| | \| | \| |
| 7+25 | 0.0558 | 0.17 | Q | V | \| | \| | \| | \| |
| 7+30 | 0.0570 | 0.17 | Q | V | \| | \| | \| | \| |
| 7+35 | 0.0582 | 0.18 | Q | V | \| | \| | \| | \| |
| 7+40 | 0.0595 | 0.18 | Q | V | \| | \| | \| | \| |
| 7+45 | 0.0607 | 0.19 | Q | V | \| | \| | \| | \| |
| 7+50 | 0.0621 | 0.19 | Q | V | \| | \| | \| | \| |
| 7+55 | 0.0634 | 0.20 | Q | V | \| | \| | \| | \| |
| 8+ 0 | 0.0648 | 0.20 | Q | V | \| | \| | \| | \| |
| 8+ 5 | 0.0663 | 0.21 | Q | V | \| | \| | \| | \| |
| 8+10 | 0.0678 | 0.23 | Q | V | \| | \| | \| | \| |
| 8+15 | 0.0694 | 0.23 | Q | V | \| | \| | \| | \| |
| 8+20 | 0.0710 | 0.23 | Q | V | \| | \| | \| | \| |
| 8+25 | 0.0727 | 0.23 | Q | V | \| | \| | \| | \| |
| 8+30 | 0.0743 | 0.24 | Q | V | \| | \| | \| | \| |
| 8+35 | 0.0759 | 0.24 | Q | V | \| | \| | \| | \| |
| 8+40 | 0.0776 | 0.25 | Q | V | \| | \| | \| | \| |
| 8+45 | 0.0794 | 0.25 | Q | V | \| | \| | \| | \| |
| 8+50 | 0.0811 | 0.25 | \|Q | V | \| | \| | \| | \| |
| 8+55 | 0.0829 | 0.26 | \|Q | V | \| | \| | \| | \| |
| 9+ 0 | 0.0848 | 0.27 | \|Q | V | \| | \| | \| | \| |
| 9+ 5 | 0.0866 | 0.27 | \|Q | V | \| | \| | \| | \| |
| 9+10 | 0.0886 | 0.29 | \|Q | V | \| | \| | \| | \| |
| 9+15 | 0.0907 | 0.29 | \|Q | \|V | \| | \| | \| | \| |
| 9+20 | 0.0927 | 0.30 | \|Q | \|V | \| | \| | \| | \| |
| 9+25 | 0.0949 | 0.31 | \|Q | \|V | \| | \| | \| | \| |
| 9+30 | 0.0970 | 0.31 | \|Q | \|V | \| | \| | \| | \| |
| 9+35 | 0.0992 | 0.32 | \|Q | \| V | \| | \| | \| | \| |
| 9+40 | 0.1014 | 0.33 | \|Q | \| V | \| | \| | \| | \| |
| 9+45 | 0.1037 | 0.33 | \|Q | \| V | \| | \| | \| | \| |
| 9+50 | 0.1060 | 0.33 | \|Q | \|  V | \| | \| | \| | \| |
| 9+55 | 0.1083 | 0.34 | \|Q | \|  V | \| | \| | \| | \| |
| 10+ 0 | 0.1107 | 0.34 | \|Q | \|  V | \| | \| | \| | \| |
| 10+ 5 | 0.1129 | 0.32 | \|Q | \|  V | \| | \| | \| | \| |
| 10+10 | 0.1147 | 0.27 | \|Q | \|   V | \| | \| | \| | \| |
| 10+15 | 0.1165 | 0.25 | \|Q | \|   V | \| | \| | \| | \| |
| 10+20 | 0.1182 | 0.24 | Q | \|   V | \| | \| | \| | \| |
| 10+25 | 0.1198 | 0.24 | Q | \|   V | \| | \| | \| | \| |
| 10+30 | 0.1215 | 0.24 | Q | \|   V | \| | \| | \| | \| |
| 10+35 | 0.1232 | 0.26 | \|Q | \|    V | \| | \| | \| | \| |
| 10+40 | 0.1252 | 0.29 | \|Q | \|    V | \| | \| | \| | \| |
| 10+45 | 0.1273 | 0.30 | \|Q | \|    V | \| | \| | \| | \| |
| 10+50 | 0.1295 | 0.31 | \|Q | \|    V | \| | \| | \| | \| |
| 10+55 | 0.1316 | 0.31 | \|Q | \|     V | \| | \| | \| | \| |
| 11+ 0 | 0.1338 | 0.31 | \|Q | \|     V | \| | \| | \| | \| |
| 11+ 5 | 0.1359 | 0.31 | \|Q | \|     V | \| | \| | \| | \| |
| 11+10 | 0.1380 | 0.30 | \|Q | \|     V | \| | \| | \| | \| |
| 11+15 | 0.1401 | 0.30 | \|Q | \|      V | \| | \| | \| | \| |
| 11+20 | 0.1421 | 0.30 | \|Q | \|      V | \| | \| | \| | \| |
| 11+25 | 0.1442 | 0.30 | \|Q | \|      V | \| | \| | \| | \| |
| 11+30 | 0.1463 | 0.30 | \|Q | \|      V | \| | \| | \| | \| |
| 11+35 | 0.1483 | 0.29 | \|Q | \|       V | \| | \| | \| | \| |
| 11+40 | 0.1502 | 0.28 | \|Q | \|       V | \| | \| | \| | \| |
| 11+45 | 0.1521 | 0.27 | \|Q | \|       V | \| | \| | \| | \| |
| 11+50 | 0.1539 | 0.27 | \|Q | \|       V | \| | \| | \| | \| |
| 11+55 | 0.1559 | 0.28 | \|Q | \|        V | \| | \| | \| | \| |
| 12+ 0 | 0.1578 | 0.28 | \|Q | \|        V | \| | \| | \| | \| |
| 12+ 5 | 0.1599 | 0.31 | \|Q | \|        V | \| | \| | \| | \| |
| 12+10 | 0.1624 | 0.36 | \|Q | \|        V | \| | \| | \| | \| |
| 12+15 | 0.1650 | 0.38 | \|Q | \|         V | \| | \| | \| | \| |
| 12+20 | 0.1677 | 0.39 | \|Q | \|         V | \| | \| | \| | \| |
| 12+25 | 0.1705 | 0.40 | \|Q | \|         V | \| | \| | \| | \| |
| 12+30 | 0.1733 | 0.41 | \|Q | \|         \|V | \| | \| | \| | \| |
| 12+35 | 0.1761 | 0.41 | \|Q | \|         \|V | \| | \| | \| | \| |
| 12+40 | 0.1791 | 0.43 | \|Q | \|         \| V | \| | \| | \| | \| |
| 12+45 | 0.1821 | 0.44 | \|Q | \|         \| V | \| | \| | \| | \| |
| 12+50 | 0.1851 | 0.44 | \|Q | \|         \| V | \| | \| | \| | \| |
| 12+55 | 0.1882 | 0.45 | \|Q | \|         \|  V | \| | \| | \| | \| |
| 13+ 0 | 0.1914 | 0.45 | \|Q | \|         \|  V | \| | \| | \| | \| |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 13+ 5 | 0.1946 | 0.47 | Q | | V | | |
| 13+10 | 0.1982 | 0.51 | Q | | V | | |
| 13+15 | 0.2018 | 0.52 | Q | | V | | |
| 13+20 | 0.2054 | 0.53 | Q | | V | | |
| 13+25 | 0.2091 | 0.53 | Q | | V | | |
| 13+30 | 0.2128 | 0.53 | Q | | V | | |
| 13+35 | 0.2162 | 0.50 | Q | | V | | |
| 13+40 | 0.2190 | 0.41 | Q | | V | | |
| 13+45 | 0.2217 | 0.39 | Q | | V | | |
| 13+50 | 0.2242 | 0.38 | Q | | V | | |
| 13+55 | 0.2268 | 0.37 | Q | | V | | |
| 14+ 0 | 0.2293 | 0.37 | Q | | V | | |
| 14+ 5 | 0.2319 | 0.38 | Q | | V | | |
| 14+10 | 0.2347 | 0.41 | Q | | V | | |
| 14+15 | 0.2376 | 0.42 | Q | | V | | |
| 14+20 | 0.2405 | 0.42 | Q | | V | | |
| 14+25 | 0.2433 | 0.41 | Q | | V | | |
| 14+30 | 0.2461 | 0.41 | Q | | V | | |
| 14+35 | 0.2489 | 0.41 | Q | | V | | |
| 14+40 | 0.2518 | 0.41 | Q | | V | | |
| 14+45 | 0.2546 | 0.41 | Q | | V | | |
| 14+50 | 0.2574 | 0.41 | Q | | V | | |
| 14+55 | 0.2601 | 0.40 | Q | | V | | |
| 15+ 0 | 0.2629 | 0.40 | Q | | V | | |
| 15+ 5 | 0.2655 | 0.39 | Q | | V | | |
| 15+10 | 0.2682 | 0.38 | Q | | V | | |
| 15+15 | 0.2708 | 0.38 | Q | | V | | |
| 15+20 | 0.2734 | 0.38 | Q | | V | | |
| 15+25 | 0.2759 | 0.37 | Q | | V | | |
| 15+30 | 0.2784 | 0.36 | Q | | V | | |
| 15+35 | 0.2808 | 0.35 | Q | | V | | |
| 15+40 | 0.2830 | 0.32 | Q | | V | | |
| 15+45 | 0.2852 | 0.31 | Q | | V | | |
| 15+50 | 0.2872 | 0.30 | Q | | V | | |
| 15+55 | 0.2893 | 0.30 | Q | | V | | |
| 16+ 0 | 0.2914 | 0.30 | Q | | V | | |
| 16+ 5 | 0.2931 | 0.25 | Q | | V | | |
| 16+10 | 0.2940 | 0.13 | Q | | V | | |
| 16+15 | 0.2946 | 0.10 | Q | | V | | |
| 16+20 | 0.2952 | 0.08 | Q | | V | | |
| 16+25 | 0.2957 | 0.07 | Q | | V | | |
| 16+30 | 0.2962 | 0.07 | Q | | V | | |
| 16+35 | 0.2966 | 0.06 | Q | | V | | |
| 16+40 | 0.2969 | 0.05 | Q | | V | | |
| 16+45 | 0.2973 | 0.05 | Q | | V | | |
| 16+50 | 0.2976 | 0.05 | Q | | V | | |
| 16+55 | 0.2979 | 0.05 | Q | | V | | |
| 17+ 0 | 0.2983 | 0.05 | Q | | V | | |
| 17+ 5 | 0.2987 | 0.05 | Q | | V | | |
| 17+10 | 0.2991 | 0.07 | Q | | V | | |
| 17+15 | 0.2996 | 0.07 | Q | | V | | |
| 17+20 | 0.3002 | 0.08 | Q | | V | | |
| 17+25 | 0.3007 | 0.08 | Q | | V | | |
| 17+30 | 0.3012 | 0.08 | Q | | V | | |
| 17+35 | 0.3018 | 0.08 | Q | | V | | |
| 17+40 | 0.3023 | 0.08 | Q | | V | | |
| 17+45 | 0.3029 | 0.08 | Q | | V | | |
| 17+50 | 0.3034 | 0.08 | Q | | V | | |
| 17+55 | 0.3038 | 0.07 | Q | | V | | |
| 18+ 0 | 0.3043 | 0.07 | Q | | V | | |
| 18+ 5 | 0.3047 | 0.06 | Q | | V | | |
| 18+10 | 0.3052 | 0.06 | Q | | V | | |
| 18+15 | 0.3056 | 0.06 | Q | | V | | |
| 18+20 | 0.3060 | 0.06 | Q | | V | | |
| 18+25 | 0.3065 | 0.06 | Q | | V | | |
| 18+30 | 0.3069 | 0.06 | Q | | V | | |
| 18+35 | 0.3073 | 0.06 | Q | | V | | |
| 18+40 | 0.3077 | 0.05 | Q | | V | | |
| 18+45 | 0.3080 | 0.05 | Q | | V | | |
| 18+50 | 0.3083 | 0.04 | Q | | V | | |
| 18+55 | 0.3086 | 0.04 | Q | | V | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 19+ 0 | 0.3088 | 0.03 | Q | | | | V |
| 19+ 5 | 0.3091 | 0.04 | Q | | | | V |
| 19+10 | 0.3094 | 0.04 | Q | | | | V |
| 19+15 | 0.3097 | 0.05 | Q | | | | V |
| 19+20 | 0.3100 | 0.05 | Q | | | | V |
| 19+25 | 0.3104 | 0.06 | Q | | | | V |
| 19+30 | 0.3108 | 0.06 | Q | | | | V |
| 19+35 | 0.3112 | 0.06 | Q | | | | V |
| 19+40 | 0.3116 | 0.05 | Q | | | | V |
| 19+45 | 0.3119 | 0.05 | Q | | | | V |
| 19+50 | 0.3122 | 0.04 | Q | | | | V |
| 19+55 | 0.3125 | 0.04 | Q | | | | V |
| 20+ 0 | 0.3127 | 0.03 | Q | | | | V |
| 20+ 5 | 0.3130 | 0.04 | Q | | | | V |
| 20+10 | 0.3133 | 0.04 | Q | | | | V |
| 20+15 | 0.3136 | 0.05 | Q | | | | V |
| 20+20 | 0.3139 | 0.05 | Q | | | | V |
| 20+25 | 0.3142 | 0.05 | Q | | | | V |
| 20+30 | 0.3145 | 0.05 | Q | | | | V |
| 20+35 | 0.3149 | 0.05 | Q | | | | V |
| 20+40 | 0.3152 | 0.05 | Q | | | | V |
| 20+45 | 0.3155 | 0.05 | Q | | | | V |
| 20+50 | 0.3158 | 0.04 | Q | | | | V |
| 20+55 | 0.3161 | 0.04 | Q | | | | V |
| 21+ 0 | 0.3163 | 0.03 | Q | | | | V |
| 21+ 5 | 0.3166 | 0.04 | Q | | | | V |
| 21+10 | 0.3169 | 0.04 | Q | | | | V |
| 21+15 | 0.3172 | 0.05 | Q | | | | V |
| 21+20 | 0.3175 | 0.04 | Q | | | | V |
| 21+25 | 0.3177 | 0.04 | Q | | | | V |
| 21+30 | 0.3179 | 0.03 | Q | | | | V |
| 21+35 | 0.3182 | 0.04 | Q | | | | V |
| 21+40 | 0.3185 | 0.04 | Q | | | | V |
| 21+45 | 0.3188 | 0.05 | Q | | | | V |
| 21+50 | 0.3191 | 0.04 | Q | | | | V |
| 21+55 | 0.3193 | 0.04 | Q | | | | V |
| 22+ 0 | 0.3196 | 0.03 | Q | | | | V |
| 22+ 5 | 0.3198 | 0.04 | Q | | | | V |
| 22+10 | 0.3201 | 0.04 | Q | | | | V |
| 22+15 | 0.3204 | 0.05 | Q | | | | V |
| 22+20 | 0.3207 | 0.04 | Q | | | | V |
| 22+25 | 0.3210 | 0.04 | Q | | | | V |
| 22+30 | 0.3212 | 0.03 | Q | | | | V |
| 22+35 | 0.3214 | 0.03 | Q | | | | V |
| 22+40 | 0.3216 | 0.03 | Q | | | | V |
| 22+45 | 0.3218 | 0.03 | Q | | | | V |
| 22+50 | 0.3221 | 0.03 | Q | | | | V |
| 22+55 | 0.3223 | 0.03 | Q | | | | V |
| 23+ 0 | 0.3225 | 0.03 | Q | | | | V |
| 23+ 5 | 0.3227 | 0.03 | Q | | | | V |
| 23+10 | 0.3229 | 0.03 | Q | | | | V |
| 23+15 | 0.3232 | 0.03 | Q | | | | V |
| 23+20 | 0.3234 | 0.03 | Q | | | | V |
| 23+25 | 0.3236 | 0.03 | Q | | | | V |
| 23+30 | 0.3238 | 0.03 | Q | | | | V |
| 23+35 | 0.3240 | 0.03 | Q | | | | V |
| 23+40 | 0.3242 | 0.03 | Q | | | | V |
| 23+45 | 0.3245 | 0.03 | Q | | | | V |
| 23+50 | 0.3247 | 0.03 | Q | | | | V |
| 23+55 | 0.3249 | 0.03 | Q | | | | V |
| 24+ 0 | 0.3251 | 0.03 | Q | | | | V |
| 24+ 5 | 0.3253 | 0.02 | Q | | | | V |
| 24+10 | 0.3253 | 0.01 | Q | | | | V |
| 24+15 | 0.3254 | 0.00 | Q | | | | V |
| 24+20 | 0.3254 | 0.00 | Q | | | | V |
| 24+25 | 0.3254 | 0.00 | Q | | | | V |
| 24+30 | 0.3254 | 0.00 | Q | | | | V |
| 24+35 | 0.3254 | 0.00 | Q | | | | V |

## *POST-PROJECT CONDITION UNIT HYDROGRAPH 2-YEAR, 24-STORM DURATION*

U n i t  H y d r o g r a p h  A n a l y s i s

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Study date 10/23/21 File: ARA1POST242.out

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Riverside County Synthetic Unit Hydrology Method
RCFC & WCD Manual date - April 1978

TRI-8 Builders - S/N 615

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English (in-lb) Input Units Used
English Rainfall Data (Inches) Input Values Used

English Units used in output format

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150.10.18
UNIT HYDROGRAPH FOR BASIN NODE 118.1
POST-PROJECT CONDITION
FN: ARA1POST.UNRIV
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Drainage Area = 22.97(Ac.) = 0.036 Sq. Mi.
Drainage Area for Depth-Area Areal Adjustment = 22.97(Ac.) = 0.036 Sq. Mi.
Length along longest watercourse = 1744.00(Ft.)
Length along longest watercourse measured to centroid = 446.00(Ft.)
Length along longest watercourse = 0.330 Mi.
Length along longest watercourse measured to centroid = 0.084 Mi.
Difference in elevation = 40.50(Ft.)
Slope along watercourse = 122.6147 Ft./Mi.
Average Manning's 'N' = 0.015
Lag time = 0.037 Hr.
Lag time = 2.22 Min.
25% of lag time = 0.56 Min.
40% of lag time = 0.89 Min.
Unit time = 5.00 Min.
Duration of storm = 24 Hour(s)
User Entered Base Flow = 0.00(CFS)

2 YEAR Area rainfall data:

| Area(Ac.)[1] | Rainfall(In)[2] | Weighting[1*2] |
|---|---|---|
| 22.97 | 1.70 | 39.05 |

100 YEAR Area rainfall data:

| Area(Ac.)[1] | Rainfall(In)[2] | Weighting[1*2] |
|---|---|---|
| 22.97 | 4.25 | 97.62 |

STORM EVENT (YEAR) = 2.00
Area Averaged 2-Year Rainfall = 1.700(In)
Area Averaged 100-Year Rainfall = 4.250(In)

Point rain (area averaged) = 1.700(In)
Areal adjustment factor = 100.00 %
Adjusted average point rain = 1.700(In)

Sub-Area Data:

| Area(Ac.) | Runoff Index | Impervious % |
|---|---|---|
| 22.970 | 63.10 | 0.576 |

Total Area Entered = 22.97(Ac.)

| RI AMC2 | RI AMC-1 | Infil. Rate (In/Hr) | Impervious (Dec.%) | Adj. Infil. Rate (In/Hr) | Area% (Dec.) | F (In/Hr) |
|---|---|---|---|---|---|---|
| 63.1 | 43.1 | 0.640 | 0.576 | 0.308 | 1.000 | 0.308 |
| | | | | | Sum (F) = | 0.308 |

Area averaged mean soil loss (F) (In/Hr) = 0.308
Minimum soil loss rate ((In/Hr)) = 0.154
(for 24 hour storm duration)
Soil low loss rate (decimal) = 0.439

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U n i t H y d r o g r a p h
VALLEY S-Curve

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Unit Hydrograph Data

| Unit time period (hrs) | | Time % of lag | Distribution Graph % | Unit Hydrograph (CFS) |
|---|---|---|---|---|
| 1 | 0.083 | 224.909 | 47.399 | 10.973 |
| 2 | 0.167 | 449.817 | 41.666 | 9.645 |
| 3 | 0.250 | 674.726 | 7.867 | 1.821 |
| 4 | 0.333 | 899.635 | 3.068 | 0.710 |
| | | | Sum = 100.000 | Sum= 23.149 |

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| Unit Time (Hr.) | Pattern Percent | Storm Rain (In/Hr) | Loss rate(In./Hr) Max | Low | Effective (In/Hr) |
|---|---|---|---|---|---|
| 1 | 0.08 | 0.07 | 0.014 | 0.546 | 0.006 | 0.01 |
| 2 | 0.17 | 0.07 | 0.014 | 0.544 | 0.006 | 0.01 |
| 3 | 0.25 | 0.07 | 0.014 | 0.542 | 0.006 | 0.01 |
| 4 | 0.33 | 0.10 | 0.020 | 0.540 | 0.009 | 0.01 |
| 5 | 0.42 | 0.10 | 0.020 | 0.538 | 0.009 | 0.01 |
| 6 | 0.50 | 0.10 | 0.020 | 0.536 | 0.009 | 0.01 |
| 7 | 0.58 | 0.10 | 0.020 | 0.533 | 0.009 | 0.01 |
| 8 | 0.67 | 0.10 | 0.020 | 0.531 | 0.009 | 0.01 |
| 9 | 0.75 | 0.10 | 0.020 | 0.529 | 0.009 | 0.01 |
| 10 | 0.83 | 0.13 | 0.027 | 0.527 | 0.012 | 0.02 |
| 11 | 0.92 | 0.13 | 0.027 | 0.525 | 0.012 | 0.02 |
| 12 | 1.00 | 0.13 | 0.027 | 0.523 | 0.012 | 0.02 |
| 13 | 1.08 | 0.10 | 0.020 | 0.521 | 0.009 | 0.01 |
| 14 | 1.17 | 0.10 | 0.020 | 0.519 | 0.009 | 0.01 |
| 15 | 1.25 | 0.10 | 0.020 | 0.517 | 0.009 | 0.01 |
| 16 | 1.33 | 0.10 | 0.020 | 0.515 | 0.009 | 0.01 |
| 17 | 1.42 | 0.10 | 0.020 | 0.513 | 0.009 | 0.01 |
| 18 | 1.50 | 0.10 | 0.020 | 0.511 | 0.009 | 0.01 |
| 19 | 1.58 | 0.10 | 0.020 | 0.509 | 0.009 | 0.01 |
| 20 | 1.67 | 0.10 | 0.020 | 0.507 | 0.009 | 0.01 |
| 21 | 1.75 | 0.10 | 0.020 | 0.505 | 0.009 | 0.01 |
| 22 | 1.83 | 0.13 | 0.027 | 0.503 | 0.012 | 0.02 |
| 23 | 1.92 | 0.13 | 0.027 | 0.501 | 0.012 | 0.02 |
| 24 | 2.00 | 0.13 | 0.027 | 0.499 | 0.012 | 0.02 |
| 25 | 2.08 | 0.13 | 0.027 | 0.497 | 0.012 | 0.02 |
| 26 | 2.17 | 0.13 | 0.027 | 0.495 | 0.012 | 0.02 |
| 27 | 2.25 | 0.13 | 0.027 | 0.493 | 0.012 | 0.02 |
| 28 | 2.33 | 0.13 | 0.027 | 0.490 | 0.012 | 0.02 |
| 29 | 2.42 | 0.13 | 0.027 | 0.488 | 0.012 | 0.02 |
| 30 | 2.50 | 0.13 | 0.027 | 0.487 | 0.012 | 0.02 |
| 31 | 2.58 | 0.17 | 0.034 | 0.485 | 0.015 | 0.02 |
| 32 | 2.67 | 0.17 | 0.034 | 0.483 | 0.015 | 0.02 |
| 33 | 2.75 | 0.17 | 0.034 | 0.481 | 0.015 | 0.02 |
| 34 | 2.83 | 0.17 | 0.034 | 0.479 | 0.015 | 0.02 |
| 35 | 2.92 | 0.17 | 0.034 | 0.477 | 0.015 | 0.02 |
| 36 | 3.00 | 0.17 | 0.034 | 0.475 | 0.015 | 0.02 |
| 37 | 3.08 | 0.17 | 0.034 | 0.473 | 0.015 | 0.02 |
| 38 | 3.17 | 0.17 | 0.034 | 0.471 | 0.015 | 0.02 |
| 39 | 3.25 | 0.17 | 0.034 | 0.469 | 0.015 | 0.02 |
| 40 | 3.33 | 0.17 | 0.034 | 0.467 | 0.015 | 0.02 |
| 41 | 3.42 | 0.17 | 0.034 | 0.465 | 0.015 | 0.02 |
| 42 | 3.50 | 0.17 | 0.034 | 0.463 | 0.015 | 0.02 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 43 | 3.58 | 0.17 | 0.034 | 0.461 | 0.015 | 0.02 |
| 44 | 3.67 | 0.17 | 0.034 | 0.459 | 0.015 | 0.02 |
| 45 | 3.75 | 0.17 | 0.034 | 0.457 | 0.015 | 0.02 |
| 46 | 3.83 | 0.20 | 0.041 | 0.455 | 0.018 | 0.02 |
| 47 | 3.92 | 0.20 | 0.041 | 0.453 | 0.018 | 0.02 |
| 48 | 4.00 | 0.20 | 0.041 | 0.451 | 0.018 | 0.02 |
| 49 | 4.08 | 0.20 | 0.041 | 0.449 | 0.018 | 0.02 |
| 50 | 4.17 | 0.20 | 0.041 | 0.447 | 0.018 | 0.02 |
| 51 | 4.25 | 0.20 | 0.041 | 0.446 | 0.018 | 0.02 |
| 52 | 4.33 | 0.23 | 0.048 | 0.444 | 0.021 | 0.03 |
| 53 | 4.42 | 0.23 | 0.048 | 0.442 | 0.021 | 0.03 |
| 54 | 4.50 | 0.23 | 0.048 | 0.440 | 0.021 | 0.03 |
| 55 | 4.58 | 0.23 | 0.048 | 0.438 | 0.021 | 0.03 |
| 56 | 4.67 | 0.23 | 0.048 | 0.436 | 0.021 | 0.03 |
| 57 | 4.75 | 0.23 | 0.048 | 0.434 | 0.021 | 0.03 |
| 58 | 4.83 | 0.27 | 0.054 | 0.432 | 0.024 | 0.03 |
| 59 | 4.92 | 0.27 | 0.054 | 0.431 | 0.024 | 0.03 |
| 60 | 5.00 | 0.27 | 0.054 | 0.429 | 0.024 | 0.03 |
| 61 | 5.08 | 0.20 | 0.041 | 0.427 | 0.018 | 0.02 |
| 62 | 5.17 | 0.20 | 0.041 | 0.425 | 0.018 | 0.02 |
| 63 | 5.25 | 0.20 | 0.041 | 0.423 | 0.018 | 0.02 |
| 64 | 5.33 | 0.23 | 0.048 | 0.421 | 0.021 | 0.03 |
| 65 | 5.42 | 0.23 | 0.048 | 0.419 | 0.021 | 0.03 |
| 66 | 5.50 | 0.23 | 0.048 | 0.418 | 0.021 | 0.03 |
| 67 | 5.58 | 0.27 | 0.054 | 0.416 | 0.024 | 0.03 |
| 68 | 5.67 | 0.27 | 0.054 | 0.414 | 0.024 | 0.03 |
| 69 | 5.75 | 0.27 | 0.054 | 0.412 | 0.024 | 0.03 |
| 70 | 5.83 | 0.27 | 0.054 | 0.410 | 0.024 | 0.03 |
| 71 | 5.92 | 0.27 | 0.054 | 0.408 | 0.024 | 0.03 |
| 72 | 6.00 | 0.27 | 0.054 | 0.407 | 0.024 | 0.03 |
| 73 | 6.08 | 0.30 | 0.061 | 0.405 | 0.027 | 0.03 |
| 74 | 6.17 | 0.30 | 0.061 | 0.403 | 0.027 | 0.03 |
| 75 | 6.25 | 0.30 | 0.061 | 0.401 | 0.027 | 0.03 |
| 76 | 6.33 | 0.30 | 0.061 | 0.399 | 0.027 | 0.03 |
| 77 | 6.42 | 0.30 | 0.061 | 0.398 | 0.027 | 0.03 |
| 78 | 6.50 | 0.30 | 0.061 | 0.396 | 0.027 | 0.03 |
| 79 | 6.58 | 0.33 | 0.068 | 0.394 | 0.030 | 0.04 |
| 80 | 6.67 | 0.33 | 0.068 | 0.392 | 0.030 | 0.04 |
| 81 | 6.75 | 0.33 | 0.068 | 0.391 | 0.030 | 0.04 |
| 82 | 6.83 | 0.33 | 0.068 | 0.389 | 0.030 | 0.04 |
| 83 | 6.92 | 0.33 | 0.068 | 0.387 | 0.030 | 0.04 |
| 84 | 7.00 | 0.33 | 0.068 | 0.385 | 0.030 | 0.04 |
| 85 | 7.08 | 0.33 | 0.068 | 0.383 | 0.030 | 0.04 |
| 86 | 7.17 | 0.33 | 0.068 | 0.382 | 0.030 | 0.04 |
| 87 | 7.25 | 0.33 | 0.068 | 0.380 | 0.030 | 0.04 |
| 88 | 7.33 | 0.37 | 0.075 | 0.378 | 0.033 | 0.04 |
| 89 | 7.42 | 0.37 | 0.075 | 0.377 | 0.033 | 0.04 |
| 90 | 7.50 | 0.37 | 0.075 | 0.375 | 0.033 | 0.04 |
| 91 | 7.58 | 0.40 | 0.082 | 0.373 | 0.036 | 0.05 |
| 92 | 7.67 | 0.40 | 0.082 | 0.371 | 0.036 | 0.05 |
| 93 | 7.75 | 0.40 | 0.082 | 0.370 | 0.036 | 0.05 |
| 94 | 7.83 | 0.43 | 0.088 | 0.368 | 0.039 | 0.05 |
| 95 | 7.92 | 0.43 | 0.088 | 0.366 | 0.039 | 0.05 |
| 96 | 8.00 | 0.43 | 0.088 | 0.365 | 0.039 | 0.05 |
| 97 | 8.08 | 0.50 | 0.102 | 0.363 | 0.045 | 0.06 |
| 98 | 8.17 | 0.50 | 0.102 | 0.361 | 0.045 | 0.06 |
| 99 | 8.25 | 0.50 | 0.102 | 0.359 | 0.045 | 0.06 |
| 100 | 8.33 | 0.50 | 0.102 | 0.358 | 0.045 | 0.06 |
| 101 | 8.42 | 0.50 | 0.102 | 0.356 | 0.045 | 0.06 |
| 102 | 8.50 | 0.50 | 0.102 | 0.354 | 0.045 | 0.06 |
| 103 | 8.58 | 0.53 | 0.109 | 0.353 | 0.048 | 0.06 |
| 104 | 8.67 | 0.53 | 0.109 | 0.351 | 0.048 | 0.06 |
| 105 | 8.75 | 0.53 | 0.109 | 0.349 | 0.048 | 0.06 |
| 106 | 8.83 | 0.57 | 0.116 | 0.348 | 0.051 | 0.06 |
| 107 | 8.92 | 0.57 | 0.116 | 0.346 | 0.051 | 0.06 |
| 108 | 9.00 | 0.57 | 0.116 | 0.345 | 0.051 | 0.06 |
| 109 | 9.08 | 0.63 | 0.129 | 0.343 | 0.057 | 0.07 |
| 110 | 9.17 | 0.63 | 0.129 | 0.341 | 0.057 | 0.07 |
| 111 | 9.25 | 0.63 | 0.129 | 0.340 | 0.057 | 0.07 |
| 112 | 9.33 | 0.67 | 0.136 | 0.338 | 0.060 | 0.08 |
| 113 | 9.42 | 0.67 | 0.136 | 0.336 | 0.060 | 0.08 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 114 | 9.50 | 0.67 | 0.136 | 0.335 | 0.060 | 0.08 |
| 115 | 9.58 | 0.70 | 0.143 | 0.333 | 0.063 | 0.08 |
| 116 | 9.67 | 0.70 | 0.143 | 0.332 | 0.063 | 0.08 |
| 117 | 9.75 | 0.70 | 0.143 | 0.330 | 0.063 | 0.08 |
| 118 | 9.83 | 0.73 | 0.150 | 0.328 | 0.066 | 0.08 |
| 119 | 9.92 | 0.73 | 0.150 | 0.327 | 0.066 | 0.08 |
| 120 | 10.00 | 0.73 | 0.150 | 0.325 | 0.066 | 0.08 |
| 121 | 10.08 | 0.50 | 0.102 | 0.324 | 0.045 | 0.06 |
| 122 | 10.17 | 0.50 | 0.102 | 0.322 | 0.045 | 0.06 |
| 123 | 10.25 | 0.50 | 0.102 | 0.321 | 0.045 | 0.06 |
| 124 | 10.33 | 0.50 | 0.102 | 0.319 | 0.045 | 0.06 |
| 125 | 10.42 | 0.50 | 0.102 | 0.317 | 0.045 | 0.06 |
| 126 | 10.50 | 0.50 | 0.102 | 0.316 | 0.045 | 0.06 |
| 127 | 10.58 | 0.67 | 0.136 | 0.314 | 0.060 | 0.08 |
| 128 | 10.67 | 0.67 | 0.136 | 0.313 | 0.060 | 0.08 |
| 129 | 10.75 | 0.67 | 0.136 | 0.311 | 0.060 | 0.08 |
| 130 | 10.83 | 0.67 | 0.136 | 0.310 | 0.060 | 0.08 |
| 131 | 10.92 | 0.67 | 0.136 | 0.308 | 0.060 | 0.08 |
| 132 | 11.00 | 0.67 | 0.136 | 0.307 | 0.060 | 0.08 |
| 133 | 11.08 | 0.63 | 0.129 | 0.305 | 0.057 | 0.07 |
| 134 | 11.17 | 0.63 | 0.129 | 0.304 | 0.057 | 0.07 |
| 135 | 11.25 | 0.63 | 0.129 | 0.302 | 0.057 | 0.07 |
| 136 | 11.33 | 0.63 | 0.129 | 0.301 | 0.057 | 0.07 |
| 137 | 11.42 | 0.63 | 0.129 | 0.299 | 0.057 | 0.07 |
| 138 | 11.50 | 0.63 | 0.129 | 0.298 | 0.057 | 0.07 |
| 139 | 11.58 | 0.57 | 0.116 | 0.296 | 0.051 | 0.06 |
| 140 | 11.67 | 0.57 | 0.116 | 0.295 | 0.051 | 0.06 |
| 141 | 11.75 | 0.57 | 0.116 | 0.293 | 0.051 | 0.06 |
| 142 | 11.83 | 0.60 | 0.122 | 0.292 | 0.054 | 0.07 |
| 143 | 11.92 | 0.60 | 0.122 | 0.290 | 0.054 | 0.07 |
| 144 | 12.00 | 0.60 | 0.122 | 0.289 | 0.054 | 0.07 |
| 145 | 12.08 | 0.83 | 0.170 | 0.288 | 0.075 | 0.10 |
| 146 | 12.17 | 0.83 | 0.170 | 0.286 | 0.075 | 0.10 |
| 147 | 12.25 | 0.83 | 0.170 | 0.285 | 0.075 | 0.10 |
| 148 | 12.33 | 0.87 | 0.177 | 0.283 | 0.078 | 0.10 |
| 149 | 12.42 | 0.87 | 0.177 | 0.282 | 0.078 | 0.10 |
| 150 | 12.50 | 0.87 | 0.177 | 0.280 | 0.078 | 0.10 |
| 151 | 12.58 | 0.93 | 0.190 | 0.279 | 0.084 | 0.11 |
| 152 | 12.67 | 0.93 | 0.190 | 0.278 | 0.084 | 0.11 |
| 153 | 12.75 | 0.93 | 0.190 | 0.276 | 0.084 | 0.11 |
| 154 | 12.83 | 0.97 | 0.197 | 0.275 | 0.087 | 0.11 |
| 155 | 12.92 | 0.97 | 0.197 | 0.273 | 0.087 | 0.11 |
| 156 | 13.00 | 0.97 | 0.197 | 0.272 | 0.087 | 0.11 |
| 157 | 13.08 | 1.13 | 0.231 | 0.271 | 0.102 | 0.13 |
| 158 | 13.17 | 1.13 | 0.231 | 0.269 | 0.102 | 0.13 |
| 159 | 13.25 | 1.13 | 0.231 | 0.268 | 0.102 | 0.13 |
| 160 | 13.33 | 1.13 | 0.231 | 0.267 | 0.102 | 0.13 |
| 161 | 13.42 | 1.13 | 0.231 | 0.265 | 0.102 | 0.13 |
| 162 | 13.50 | 1.13 | 0.231 | 0.264 | 0.102 | 0.13 |
| 163 | 13.58 | 0.77 | 0.156 | 0.263 | 0.069 | 0.09 |
| 164 | 13.67 | 0.77 | 0.156 | 0.261 | 0.069 | 0.09 |
| 165 | 13.75 | 0.77 | 0.156 | 0.260 | 0.069 | 0.09 |
| 166 | 13.83 | 0.77 | 0.156 | 0.259 | 0.069 | 0.09 |
| 167 | 13.92 | 0.77 | 0.156 | 0.257 | 0.069 | 0.09 |
| 168 | 14.00 | 0.77 | 0.156 | 0.256 | 0.069 | 0.09 |
| 169 | 14.08 | 0.90 | 0.184 | 0.255 | 0.081 | 0.10 |
| 170 | 14.17 | 0.90 | 0.184 | 0.253 | 0.081 | 0.10 |
| 171 | 14.25 | 0.90 | 0.184 | 0.252 | 0.081 | 0.10 |
| 172 | 14.33 | 0.87 | 0.177 | 0.251 | 0.078 | 0.10 |
| 173 | 14.42 | 0.87 | 0.177 | 0.249 | 0.078 | 0.10 |
| 174 | 14.50 | 0.87 | 0.177 | 0.248 | 0.078 | 0.10 |
| 175 | 14.58 | 0.87 | 0.177 | 0.247 | 0.078 | 0.10 |
| 176 | 14.67 | 0.87 | 0.177 | 0.246 | 0.078 | 0.10 |
| 177 | 14.75 | 0.87 | 0.177 | 0.244 | 0.078 | 0.10 |
| 178 | 14.83 | 0.83 | 0.170 | 0.243 | 0.075 | 0.10 |
| 179 | 14.92 | 0.83 | 0.170 | 0.242 | 0.075 | 0.10 |
| 180 | 15.00 | 0.83 | 0.170 | 0.241 | 0.075 | 0.10 |
| 181 | 15.08 | 0.80 | 0.163 | 0.239 | 0.072 | 0.09 |
| 182 | 15.17 | 0.80 | 0.163 | 0.238 | 0.072 | 0.09 |
| 183 | 15.25 | 0.80 | 0.163 | 0.237 | 0.072 | 0.09 |
| 184 | 15.33 | 0.77 | 0.156 | 0.236 | 0.069 | 0.09 |

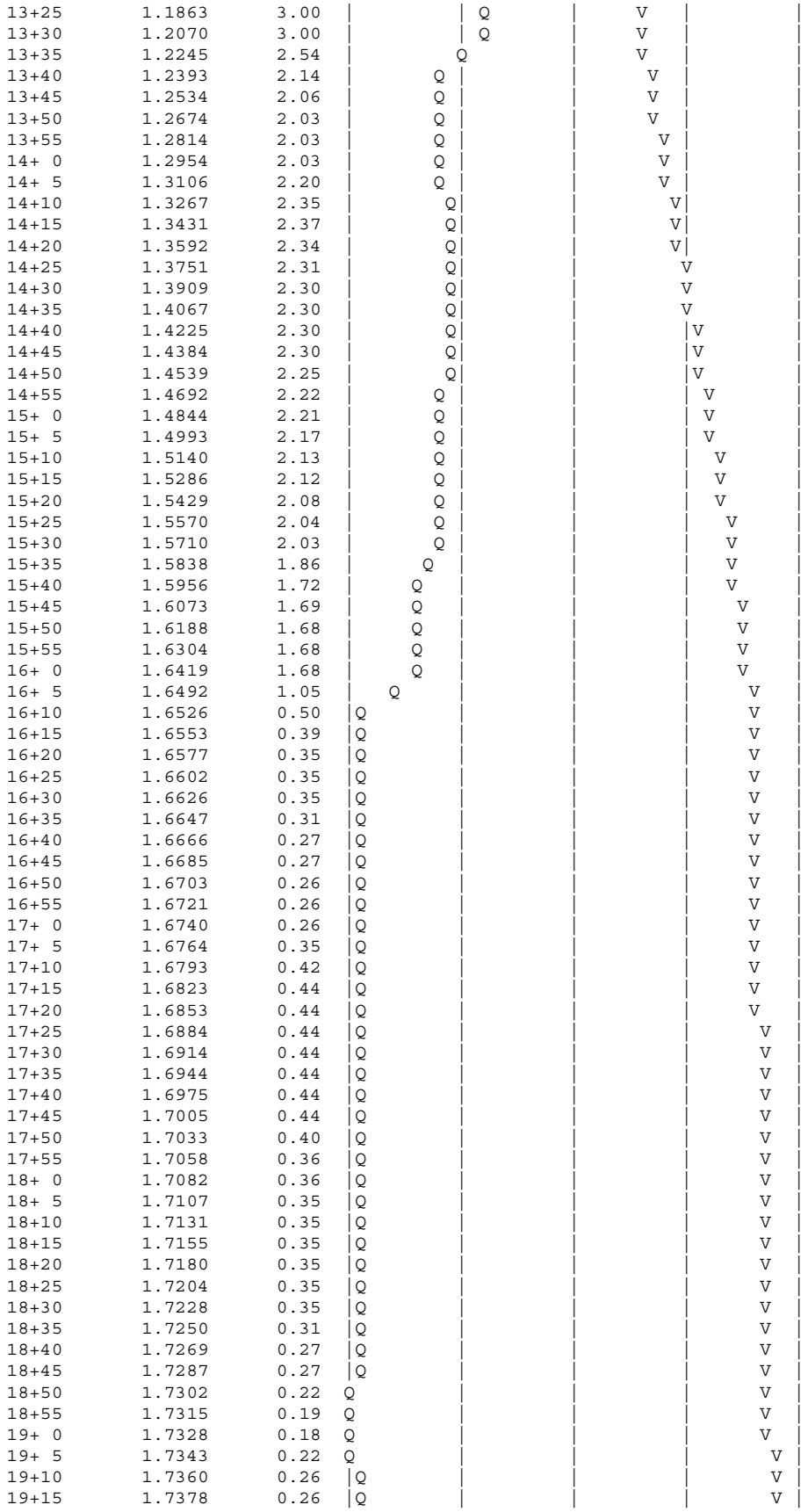
| | | | | | | |
|---|---|---|---|---|---|---|
| 185 | 15.42 | 0.77 | 0.156 | 0.234 | 0.069 | 0.09 |
| 186 | 15.50 | 0.77 | 0.156 | 0.233 | 0.069 | 0.09 |
| 187 | 15.58 | 0.63 | 0.129 | 0.232 | 0.057 | 0.07 |
| 188 | 15.67 | 0.63 | 0.129 | 0.231 | 0.057 | 0.07 |
| 189 | 15.75 | 0.63 | 0.129 | 0.230 | 0.057 | 0.07 |
| 190 | 15.83 | 0.63 | 0.129 | 0.229 | 0.057 | 0.07 |
| 191 | 15.92 | 0.63 | 0.129 | 0.227 | 0.057 | 0.07 |
| 192 | 16.00 | 0.63 | 0.129 | 0.226 | 0.057 | 0.07 |
| 193 | 16.08 | 0.13 | 0.027 | 0.225 | 0.012 | 0.02 |
| 194 | 16.17 | 0.13 | 0.027 | 0.224 | 0.012 | 0.02 |
| 195 | 16.25 | 0.13 | 0.027 | 0.223 | 0.012 | 0.02 |
| 196 | 16.33 | 0.13 | 0.027 | 0.222 | 0.012 | 0.02 |
| 197 | 16.42 | 0.13 | 0.027 | 0.220 | 0.012 | 0.02 |
| 198 | 16.50 | 0.13 | 0.027 | 0.219 | 0.012 | 0.02 |
| 199 | 16.58 | 0.10 | 0.020 | 0.218 | 0.009 | 0.01 |
| 200 | 16.67 | 0.10 | 0.020 | 0.217 | 0.009 | 0.01 |
| 201 | 16.75 | 0.10 | 0.020 | 0.216 | 0.009 | 0.01 |
| 202 | 16.83 | 0.10 | 0.020 | 0.215 | 0.009 | 0.01 |
| 203 | 16.92 | 0.10 | 0.020 | 0.214 | 0.009 | 0.01 |
| 204 | 17.00 | 0.10 | 0.020 | 0.213 | 0.009 | 0.01 |
| 205 | 17.08 | 0.17 | 0.034 | 0.212 | 0.015 | 0.02 |
| 206 | 17.17 | 0.17 | 0.034 | 0.211 | 0.015 | 0.02 |
| 207 | 17.25 | 0.17 | 0.034 | 0.210 | 0.015 | 0.02 |
| 208 | 17.33 | 0.17 | 0.034 | 0.209 | 0.015 | 0.02 |
| 209 | 17.42 | 0.17 | 0.034 | 0.207 | 0.015 | 0.02 |
| 210 | 17.50 | 0.17 | 0.034 | 0.206 | 0.015 | 0.02 |
| 211 | 17.58 | 0.17 | 0.034 | 0.205 | 0.015 | 0.02 |
| 212 | 17.67 | 0.17 | 0.034 | 0.204 | 0.015 | 0.02 |
| 213 | 17.75 | 0.17 | 0.034 | 0.203 | 0.015 | 0.02 |
| 214 | 17.83 | 0.13 | 0.027 | 0.202 | 0.012 | 0.02 |
| 215 | 17.92 | 0.13 | 0.027 | 0.201 | 0.012 | 0.02 |
| 216 | 18.00 | 0.13 | 0.027 | 0.200 | 0.012 | 0.02 |
| 217 | 18.08 | 0.13 | 0.027 | 0.199 | 0.012 | 0.02 |
| 218 | 18.17 | 0.13 | 0.027 | 0.198 | 0.012 | 0.02 |
| 219 | 18.25 | 0.13 | 0.027 | 0.197 | 0.012 | 0.02 |
| 220 | 18.33 | 0.13 | 0.027 | 0.196 | 0.012 | 0.02 |
| 221 | 18.42 | 0.13 | 0.027 | 0.196 | 0.012 | 0.02 |
| 222 | 18.50 | 0.13 | 0.027 | 0.195 | 0.012 | 0.02 |
| 223 | 18.58 | 0.10 | 0.020 | 0.194 | 0.009 | 0.01 |
| 224 | 18.67 | 0.10 | 0.020 | 0.193 | 0.009 | 0.01 |
| 225 | 18.75 | 0.10 | 0.020 | 0.192 | 0.009 | 0.01 |
| 226 | 18.83 | 0.07 | 0.014 | 0.191 | 0.006 | 0.01 |
| 227 | 18.92 | 0.07 | 0.014 | 0.190 | 0.006 | 0.01 |
| 228 | 19.00 | 0.07 | 0.014 | 0.189 | 0.006 | 0.01 |
| 229 | 19.08 | 0.10 | 0.020 | 0.188 | 0.009 | 0.01 |
| 230 | 19.17 | 0.10 | 0.020 | 0.187 | 0.009 | 0.01 |
| 231 | 19.25 | 0.10 | 0.020 | 0.186 | 0.009 | 0.01 |
| 232 | 19.33 | 0.13 | 0.027 | 0.186 | 0.012 | 0.02 |
| 233 | 19.42 | 0.13 | 0.027 | 0.185 | 0.012 | 0.02 |
| 234 | 19.50 | 0.13 | 0.027 | 0.184 | 0.012 | 0.02 |
| 235 | 19.58 | 0.10 | 0.020 | 0.183 | 0.009 | 0.01 |
| 236 | 19.67 | 0.10 | 0.020 | 0.182 | 0.009 | 0.01 |
| 237 | 19.75 | 0.10 | 0.020 | 0.181 | 0.009 | 0.01 |
| 238 | 19.83 | 0.07 | 0.014 | 0.180 | 0.006 | 0.01 |
| 239 | 19.92 | 0.07 | 0.014 | 0.180 | 0.006 | 0.01 |
| 240 | 20.00 | 0.07 | 0.014 | 0.179 | 0.006 | 0.01 |
| 241 | 20.08 | 0.10 | 0.020 | 0.178 | 0.009 | 0.01 |
| 242 | 20.17 | 0.10 | 0.020 | 0.177 | 0.009 | 0.01 |
| 243 | 20.25 | 0.10 | 0.020 | 0.177 | 0.009 | 0.01 |
| 244 | 20.33 | 0.10 | 0.020 | 0.176 | 0.009 | 0.01 |
| 245 | 20.42 | 0.10 | 0.020 | 0.175 | 0.009 | 0.01 |
| 246 | 20.50 | 0.10 | 0.020 | 0.174 | 0.009 | 0.01 |
| 247 | 20.58 | 0.10 | 0.020 | 0.174 | 0.009 | 0.01 |
| 248 | 20.67 | 0.10 | 0.020 | 0.173 | 0.009 | 0.01 |
| 249 | 20.75 | 0.10 | 0.020 | 0.172 | 0.009 | 0.01 |
| 250 | 20.83 | 0.07 | 0.014 | 0.171 | 0.006 | 0.01 |
| 251 | 20.92 | 0.07 | 0.014 | 0.171 | 0.006 | 0.01 |
| 252 | 21.00 | 0.07 | 0.014 | 0.170 | 0.006 | 0.01 |
| 253 | 21.08 | 0.10 | 0.020 | 0.169 | 0.009 | 0.01 |
| 254 | 21.17 | 0.10 | 0.020 | 0.169 | 0.009 | 0.01 |
| 255 | 21.25 | 0.10 | 0.020 | 0.168 | 0.009 | 0.01 |

```
256  21.33     0.07      0.014         0.167     0.006         0.01
257  21.42     0.07      0.014         0.167     0.006         0.01
258  21.50     0.07      0.014         0.166     0.006         0.01
259  21.58     0.10      0.020         0.166     0.009         0.01
260  21.67     0.10      0.020         0.165     0.009         0.01
261  21.75     0.10      0.020         0.164     0.009         0.01
262  21.83     0.07      0.014         0.164     0.006         0.01
263  21.92     0.07      0.014         0.163     0.006         0.01
264  22.00     0.07      0.014         0.163     0.006         0.01
265  22.08     0.10      0.020         0.162     0.009         0.01
266  22.17     0.10      0.020         0.162     0.009         0.01
267  22.25     0.10      0.020         0.161     0.009         0.01
268  22.33     0.07      0.014         0.161     0.006         0.01
269  22.42     0.07      0.014         0.160     0.006         0.01
270  22.50     0.07      0.014         0.160     0.006         0.01
271  22.58     0.07      0.014         0.159     0.006         0.01
272  22.67     0.07      0.014         0.159     0.006         0.01
273  22.75     0.07      0.014         0.158     0.006         0.01
274  22.83     0.07      0.014         0.158     0.006         0.01
275  22.92     0.07      0.014         0.157     0.006         0.01
276  23.00     0.07      0.014         0.157     0.006         0.01
277  23.08     0.07      0.014         0.157     0.006         0.01
278  23.17     0.07      0.014         0.156     0.006         0.01
279  23.25     0.07      0.014         0.156     0.006         0.01
280  23.33     0.07      0.014         0.156     0.006         0.01
281  23.42     0.07      0.014         0.155     0.006         0.01
282  23.50     0.07      0.014         0.155     0.006         0.01
283  23.58     0.07      0.014         0.155     0.006         0.01
284  23.67     0.07      0.014         0.155     0.006         0.01
285  23.75     0.07      0.014         0.154     0.006         0.01
286  23.83     0.07      0.014         0.154     0.006         0.01
287  23.92     0.07      0.014         0.154     0.006         0.01
288  24.00     0.07      0.014         0.154     0.006         0.01
    Sum =     100.0                                 Sum =     11.4
      Flood volume = Effective rainfall      0.95(In)
       times area      23.0(Ac.)/[(In)/(Ft.)] =       1.8(Ac.Ft)
      Total soil loss =      0.75(In)
      Total soil loss =     1.429(Ac.Ft)
      Total rainfall =      1.70(In)
      Flood volume =       79488.6 Cubic Feet
      Total soil loss =       62252.9 Cubic Feet
      ---------------------------------------------------------------------
       Peak flow rate of this hydrograph =      3.003(CFS)
      ---------------------------------------------------------------------
      +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
                          24 - H O U R    S T O R M
                     R u n o f f      H y d r o g r a p h
      ---------------------------------------------------------------------
                  Hydrograph in   5   Minute intervals ((CFS))

      ---------------------------------------------------------------------
 Time(h+m) Volume Ac.Ft   Q(CFS)  0        2.5       5.0       7.5      10.0
 ---------------------------------------------------------------------------
   0+ 5       0.0006      0.08  Q         |         |         |         |
   0+10       0.0017      0.16  Q         |         |         |         |
   0+15       0.0028      0.17  Q         |         |         |         |
   0+20       0.0043      0.22  Q         |         |         |         |
   0+25       0.0061      0.26  VQ        |         |         |         |
   0+30       0.0079      0.26  VQ        |         |         |         |
   0+35       0.0097      0.26  VQ        |         |         |         |
   0+40       0.0116      0.26  VQ        |         |         |         |
   0+45       0.0134      0.26  VQ        |         |         |         |
   0+50       0.0155      0.31  VQ        |         |         |         |
   0+55       0.0179      0.34  VQ        |         |         |         |
   1+ 0       0.0203      0.35  VQ        |         |         |         |
   1+ 5       0.0224      0.31  VQ        |         |         |         |
   1+10       0.0243      0.27  VQ        |         |         |         |
   1+15       0.0262      0.27  VQ        |         |         |         |
   1+20       0.0280      0.26  VQ        |         |         |         |
   1+25       0.0298      0.26  VQ        |         |         |         |
   1+30       0.0316      0.26  VQ        |         |         |         |
```

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1+35 | 0.0335 | 0.26 | VQ | \| | \| | \| | \| |
| 1+40 | 0.0353 | 0.26 | VQ | \| | \| | \| | \| |
| 1+45 | 0.0371 | 0.26 | VQ | \| | \| | \| | \| |
| 1+50 | 0.0392 | 0.31 | VQ | \| | \| | \| | \| |
| 1+55 | 0.0416 | 0.34 | VQ | \| | \| | \| | \| |
| 2+ 0 | 0.0440 | 0.35 | VQ | \| | \| | \| | \| |
| 2+ 5 | 0.0464 | 0.35 | \|Q | \| | \| | \| | \| |
| 2+10 | 0.0489 | 0.35 | \|Q | \| | \| | \| | \| |
| 2+15 | 0.0513 | 0.35 | \|Q | \| | \| | \| | \| |
| 2+20 | 0.0537 | 0.35 | \|Q | \| | \| | \| | \| |
| 2+25 | 0.0562 | 0.35 | \|Q | \| | \| | \| | \| |
| 2+30 | 0.0586 | 0.35 | \|Q | \| | \| | \| | \| |
| 2+35 | 0.0613 | 0.40 | \|Q | \| | \| | \| | \| |
| 2+40 | 0.0643 | 0.43 | \|Q | \| | \| | \| | \| |
| 2+45 | 0.0673 | 0.44 | \|Q | \| | \| | \| | \| |
| 2+50 | 0.0704 | 0.44 | \|Q | \| | \| | \| | \| |
| 2+55 | 0.0734 | 0.44 | \|Q | \| | \| | \| | \| |
| 3+ 0 | 0.0764 | 0.44 | \|Q | \| | \| | \| | \| |
| 3+ 5 | 0.0795 | 0.44 | \|Q | \| | \| | \| | \| |
| 3+10 | 0.0825 | 0.44 | \|Q | \| | \| | \| | \| |
| 3+15 | 0.0856 | 0.44 | \|Q | \| | \| | \| | \| |
| 3+20 | 0.0886 | 0.44 | \|Q | \| | \| | \| | \| |
| 3+25 | 0.0916 | 0.44 | \|QV | \| | \| | \| | \| |
| 3+30 | 0.0947 | 0.44 | \|QV | \| | \| | \| | \| |
| 3+35 | 0.0977 | 0.44 | \|QV | \| | \| | \| | \| |
| 3+40 | 0.1008 | 0.44 | \|QV | \| | \| | \| | \| |
| 3+45 | 0.1038 | 0.44 | \|QV | \| | \| | \| | \| |
| 3+50 | 0.1071 | 0.48 | \|QV | \| | \| | \| | \| |
| 3+55 | 0.1107 | 0.52 | \| Q | \| | \| | \| | \| |
| 4+ 0 | 0.1144 | 0.53 | \| Q | \| | \| | \| | \| |
| 4+ 5 | 0.1180 | 0.53 | \| Q | \| | \| | \| | \| |
| 4+10 | 0.1217 | 0.53 | \| Q | \| | \| | \| | \| |
| 4+15 | 0.1253 | 0.53 | \| Q | \| | \| | \| | \| |
| 4+20 | 0.1292 | 0.57 | \| Q | \| | \| | \| | \| |
| 4+25 | 0.1334 | 0.61 | \| Q | \| | \| | \| | \| |
| 4+30 | 0.1377 | 0.62 | \| QV | \| | \| | \| | \| |
| 4+35 | 0.1419 | 0.62 | \| QV | \| | \| | \| | \| |
| 4+40 | 0.1462 | 0.62 | \| QV | \| | \| | \| | \| |
| 4+45 | 0.1504 | 0.62 | \| QV | \| | \| | \| | \| |
| 4+50 | 0.1550 | 0.66 | \| QV | \| | \| | \| | \| |
| 4+55 | 0.1598 | 0.70 | \| QV | \| | \| | \| | \| |
| 5+ 0 | 0.1646 | 0.70 | \| QV | \| | \| | \| | \| |
| 5+ 5 | 0.1689 | 0.62 | \| QV | \| | \| | \| | \| |
| 5+10 | 0.1727 | 0.55 | \| QV | \| | \| | \| | \| |
| 5+15 | 0.1764 | 0.54 | \| QV | \| | \| | \| | \| |
| 5+20 | 0.1803 | 0.57 | \| QV | \| | \| | \| | \| |
| 5+25 | 0.1845 | 0.61 | \| Q V | \| | \| | \| | \| |
| 5+30 | 0.1888 | 0.62 | \| Q V | \| | \| | \| | \| |
| 5+35 | 0.1933 | 0.66 | \| Q V | \| | \| | \| | \| |
| 5+40 | 0.1981 | 0.70 | \| Q V | \| | \| | \| | \| |
| 5+45 | 0.2030 | 0.70 | \| Q V | \| | \| | \| | \| |
| 5+50 | 0.2078 | 0.71 | \| Q V | \| | \| | \| | \| |
| 5+55 | 0.2127 | 0.71 | \| Q V | \| | \| | \| | \| |
| 6+ 0 | 0.2176 | 0.71 | \| Q V | \| | \| | \| | \| |
| 6+ 5 | 0.2227 | 0.75 | \| Q V | \| | \| | \| | \| |
| 6+10 | 0.2281 | 0.79 | \|  Q V | \| | \| | \| | \| |
| 6+15 | 0.2336 | 0.79 | \|  Q V | \| | \| | \| | \| |
| 6+20 | 0.2391 | 0.79 | \|  Q V | \| | \| | \| | \| |
| 6+25 | 0.2445 | 0.79 | \|  Q V | \| | \| | \| | \| |
| 6+30 | 0.2500 | 0.79 | \|  Q V | \| | \| | \| | \| |
| 6+35 | 0.2558 | 0.84 | \|  Q V | \| | \| | \| | \| |
| 6+40 | 0.2618 | 0.87 | \|  Q V | \| | \| | \| | \| |
| 6+45 | 0.2678 | 0.88 | \|  Q V | \| | \| | \| | \| |
| 6+50 | 0.2739 | 0.88 | \|  Q  V | \| | \| | \| | \| |
| 6+55 | 0.2800 | 0.88 | \|  Q  V | \| | \| | \| | \| |
| 7+ 0 | 0.2861 | 0.88 | \|  Q  V | \| | \| | \| | \| |
| 7+ 5 | 0.2922 | 0.88 | \|  Q  V | \| | \| | \| | \| |
| 7+10 | 0.2983 | 0.88 | \|  Q  V | \| | \| | \| | \| |
| 7+15 | 0.3043 | 0.88 | \|  Q  V | \| | \| | \| | \| |
| 7+20 | 0.3107 | 0.93 | \|  Q  V | \| | \| | \| | \| |
| 7+25 | 0.3173 | 0.96 | \|  Q  V | \| | \| | \| | \| |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 7+30 | 0.3240 | 0.97 | Q V | | | | |
| 7+35 | 0.3310 | 1.01 | Q V | | | | |
| 7+40 | 0.3382 | 1.05 | Q V | | | | |
| 7+45 | 0.3455 | 1.06 | Q V | | | | |
| 7+50 | 0.3531 | 1.10 | Q V | | | | |
| 7+55 | 0.3609 | 1.14 | Q V | | | | |
| 8+ 0 | 0.3688 | 1.15 | Q V | | | | |
| 8+ 5 | 0.3773 | 1.23 | Q V | | | | |
| 8+10 | 0.3863 | 1.31 | Q V | | | | |
| 8+15 | 0.3954 | 1.32 | Q V | | | | |
| 8+20 | 0.4045 | 1.32 | Q V | | | | |
| 8+25 | 0.4136 | 1.32 | Q V | | | | |
| 8+30 | 0.4228 | 1.32 | Q V | | | | |
| 8+35 | 0.4322 | 1.37 | Q V | | | | |
| 8+40 | 0.4418 | 1.40 | Q V | | | | |
| 8+45 | 0.4515 | 1.41 | Q V | | | | |
| 8+50 | 0.4616 | 1.45 | Q V | | | | |
| 8+55 | 0.4718 | 1.49 | Q V | | | | |
| 9+ 0 | 0.4822 | 1.50 | Q V | | | | |
| 9+ 5 | 0.4931 | 1.59 | Q V | | | | |
| 9+10 | 0.5045 | 1.66 | Q V | | | | |
| 9+15 | 0.5160 | 1.67 | Q V | | | | |
| 9+20 | 0.5279 | 1.72 | Q V | | | | |
| 9+25 | 0.5400 | 1.76 | Q V | | | | |
| 9+30 | 0.5521 | 1.76 | Q V | | | | |
| 9+35 | 0.5646 | 1.81 | Q V | | | | |
| 9+40 | 0.5773 | 1.85 | Q V | | | | |
| 9+45 | 0.5900 | 1.85 | Q V | | | | |
| 9+50 | 0.6031 | 1.90 | Q V | | | | |
| 9+55 | 0.6164 | 1.93 | Q V | | | | |
| 10+ 0 | 0.6298 | 1.94 | Q V | | | | |
| 10+ 5 | 0.6411 | 1.65 | Q V | | | | |
| 10+10 | 0.6507 | 1.39 | Q V | | | | |
| 10+15 | 0.6600 | 1.34 | Q V | | | | |
| 10+20 | 0.6691 | 1.32 | Q V | | | | |
| 10+25 | 0.6782 | 1.32 | Q V | | | | |
| 10+30 | 0.6874 | 1.32 | Q V | | | | |
| 10+35 | 0.6979 | 1.53 | Q V | | | | |
| 10+40 | 0.7097 | 1.72 | Q V | | | | |
| 10+45 | 0.7218 | 1.75 | Q V | | | | |
| 10+50 | 0.7340 | 1.77 | Q V | | | | |
| 10+55 | 0.7462 | 1.77 | Q V | | | | |
| 11+ 0 | 0.7583 | 1.77 | Q V | | | | |
| 11+ 5 | 0.7702 | 1.72 | Q V | | | | |
| 11+10 | 0.7818 | 1.69 | Q V | | | | |
| 11+15 | 0.7934 | 1.68 | Q V | | | | |
| 11+20 | 0.8050 | 1.68 | Q V | | | | |
| 11+25 | 0.8165 | 1.68 | Q V | | | | |
| 11+30 | 0.8281 | 1.68 | Q V | | | | |
| 11+35 | 0.8390 | 1.59 | Q V | | | | |
| 11+40 | 0.8495 | 1.52 | Q V | | | | |
| 11+45 | 0.8599 | 1.51 | Q V | | | | |
| 11+50 | 0.8705 | 1.54 | Q V | | | | |
| 11+55 | 0.8814 | 1.58 | Q V | | | | |
| 12+ 0 | 0.8923 | 1.59 | Q V | | | | |
| 12+ 5 | 0.9053 | 1.88 | Q V | | | | |
| 12+10 | 0.9200 | 2.14 | Q V | | | | |
| 12+15 | 0.9351 | 2.19 | Q V | | | | |
| 12+20 | 0.9506 | 2.25 | Q V | | | | |
| 12+25 | 0.9664 | 2.29 | Q V | | | | |
| 12+30 | 0.9822 | 2.29 | Q V | | | | |
| 12+35 | 0.9986 | 2.38 | Q V | | | | |
| 12+40 | 1.0155 | 2.45 | Q V | | | | |
| 12+45 | 1.0324 | 2.47 | Q V | | | | |
| 12+50 | 1.0498 | 2.51 | Q V | | | | |
| 12+55 | 1.0673 | 2.55 | Q V | | | | |
| 13+ 0 | 1.0850 | 2.56 | Q V | | | | |
| 13+ 5 | 1.1040 | 2.77 | Q V | | | | |
| 13+10 | 1.1244 | 2.95 | Q V | | | | |
| 13+15 | 1.1450 | 2.99 | Q V | | | | |
| 13+20 | 1.1657 | 3.00 | Q V | | | | |



| | | | |
|---|---|---|---|
| 13+25 | 1.1863 | 3.00 | |
| 13+30 | 1.2070 | 3.00 | |
| 13+35 | 1.2245 | 2.54 | |
| 13+40 | 1.2393 | 2.14 | |
| 13+45 | 1.2534 | 2.06 | |
| 13+50 | 1.2674 | 2.03 | |
| 13+55 | 1.2814 | 2.03 | |
| 14+ 0 | 1.2954 | 2.03 | |
| 14+ 5 | 1.3106 | 2.20 | |
| 14+10 | 1.3267 | 2.35 | |
| 14+15 | 1.3431 | 2.37 | |
| 14+20 | 1.3592 | 2.34 | |
| 14+25 | 1.3751 | 2.31 | |
| 14+30 | 1.3909 | 2.30 | |
| 14+35 | 1.4067 | 2.30 | |
| 14+40 | 1.4225 | 2.30 | |
| 14+45 | 1.4384 | 2.30 | |
| 14+50 | 1.4539 | 2.25 | |
| 14+55 | 1.4692 | 2.22 | |
| 15+ 0 | 1.4844 | 2.21 | |
| 15+ 5 | 1.4993 | 2.17 | |
| 15+10 | 1.5140 | 2.13 | |
| 15+15 | 1.5286 | 2.12 | |
| 15+20 | 1.5429 | 2.08 | |
| 15+25 | 1.5570 | 2.04 | |
| 15+30 | 1.5710 | 2.03 | |
| 15+35 | 1.5838 | 1.86 | |
| 15+40 | 1.5956 | 1.72 | |
| 15+45 | 1.6073 | 1.69 | |
| 15+50 | 1.6188 | 1.68 | |
| 15+55 | 1.6304 | 1.68 | |
| 16+ 0 | 1.6419 | 1.68 | |
| 16+ 5 | 1.6492 | 1.05 | |
| 16+10 | 1.6526 | 0.50 | |
| 16+15 | 1.6553 | 0.39 | |
| 16+20 | 1.6577 | 0.35 | |
| 16+25 | 1.6602 | 0.35 | |
| 16+30 | 1.6626 | 0.35 | |
| 16+35 | 1.6647 | 0.31 | |
| 16+40 | 1.6666 | 0.27 | |
| 16+45 | 1.6685 | 0.27 | |
| 16+50 | 1.6703 | 0.26 | |
| 16+55 | 1.6721 | 0.26 | |
| 17+ 0 | 1.6740 | 0.26 | |
| 17+ 5 | 1.6764 | 0.35 | |
| 17+10 | 1.6793 | 0.42 | |
| 17+15 | 1.6823 | 0.44 | |
| 17+20 | 1.6853 | 0.44 | |
| 17+25 | 1.6884 | 0.44 | |
| 17+30 | 1.6914 | 0.44 | |
| 17+35 | 1.6944 | 0.44 | |
| 17+40 | 1.6975 | 0.44 | |
| 17+45 | 1.7005 | 0.44 | |
| 17+50 | 1.7033 | 0.40 | |
| 17+55 | 1.7058 | 0.36 | |
| 18+ 0 | 1.7082 | 0.36 | |
| 18+ 5 | 1.7107 | 0.35 | |
| 18+10 | 1.7131 | 0.35 | |
| 18+15 | 1.7155 | 0.35 | |
| 18+20 | 1.7180 | 0.35 | |
| 18+25 | 1.7204 | 0.35 | |
| 18+30 | 1.7228 | 0.35 | |
| 18+35 | 1.7250 | 0.31 | |
| 18+40 | 1.7269 | 0.27 | |
| 18+45 | 1.7287 | 0.27 | |
| 18+50 | 1.7302 | 0.22 | |
| 18+55 | 1.7315 | 0.19 | |
| 19+ 0 | 1.7328 | 0.18 | |
| 19+ 5 | 1.7343 | 0.22 | |
| 19+10 | 1.7360 | 0.26 | |
| 19+15 | 1.7378 | 0.26 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 19+20 | 1.7399 | 0.31 | \|Q | \| | \| | \| | V \| |
| 19+25 | 1.7423 | 0.34 | \|Q | \| | \| | \| | V \| |
| 19+30 | 1.7447 | 0.35 | \|Q | \| | \| | \| | V \| |
| 19+35 | 1.7469 | 0.31 | \|Q | \| | \| | \| | V \| |
| 19+40 | 1.7488 | 0.27 | \|Q | \| | \| | \| | V \| |
| 19+45 | 1.7506 | 0.27 | \|Q | \| | \| | \| | V \| |
| 19+50 | 1.7521 | 0.22 | Q | \| | \| | \| | V \| |
| 19+55 | 1.7534 | 0.19 | Q | \| | \| | \| | V \| |
| 20+ 0 | 1.7547 | 0.18 | Q | \| | \| | \| | V \| |
| 20+ 5 | 1.7562 | 0.22 | Q | \| | \| | \| | V \| |
| 20+10 | 1.7579 | 0.26 | \|Q | \| | \| | \| | V \| |
| 20+15 | 1.7597 | 0.26 | \|Q | \| | \| | \| | V \| |
| 20+20 | 1.7615 | 0.26 | \|Q | \| | \| | \| | V \| |
| 20+25 | 1.7634 | 0.26 | \|Q | \| | \| | \| | V \| |
| 20+30 | 1.7652 | 0.26 | \|Q | \| | \| | \| | V \| |
| 20+35 | 1.7670 | 0.26 | \|Q | \| | \| | \| | V \| |
| 20+40 | 1.7688 | 0.26 | \|Q | \| | \| | \| | V \| |
| 20+45 | 1.7707 | 0.26 | \|Q | \| | \| | \| | V \| |
| 20+50 | 1.7722 | 0.22 | Q | \| | \| | \| | V \| |
| 20+55 | 1.7735 | 0.19 | Q | \| | \| | \| | V \| |
| 21+ 0 | 1.7747 | 0.18 | Q | \| | \| | \| | V \| |
| 21+ 5 | 1.7762 | 0.22 | Q | \| | \| | \| | V \| |
| 21+10 | 1.7780 | 0.26 | \|Q | \| | \| | \| | V \| |
| 21+15 | 1.7798 | 0.26 | \|Q | \| | \| | \| | V\| |
| 21+20 | 1.7813 | 0.22 | Q | \| | \| | \| | V\| |
| 21+25 | 1.7826 | 0.19 | Q | \| | \| | \| | V\| |
| 21+30 | 1.7839 | 0.18 | Q | \| | \| | \| | V\| |
| 21+35 | 1.7854 | 0.22 | Q | \| | \| | \| | V\| |
| 21+40 | 1.7871 | 0.26 | \|Q | \| | \| | \| | V\| |
| 21+45 | 1.7889 | 0.26 | \|Q | \| | \| | \| | V\| |
| 21+50 | 1.7905 | 0.22 | Q | \| | \| | \| | V\| |
| 21+55 | 1.7917 | 0.19 | Q | \| | \| | \| | V\| |
| 22+ 0 | 1.7930 | 0.18 | Q | \| | \| | \| | V\| |
| 22+ 5 | 1.7945 | 0.22 | Q | \| | \| | \| | V\| |
| 22+10 | 1.7962 | 0.26 | \|Q | \| | \| | \| | V\| |
| 22+15 | 1.7980 | 0.26 | \|Q | \| | \| | \| | V\| |
| 22+20 | 1.7996 | 0.22 | Q | \| | \| | \| | V\| |
| 22+25 | 1.8009 | 0.19 | Q | \| | \| | \| | V\| |
| 22+30 | 1.8021 | 0.18 | Q | \| | \| | \| | V\| |
| 22+35 | 1.8033 | 0.18 | Q | \| | \| | \| | V\| |
| 22+40 | 1.8045 | 0.18 | Q | \| | \| | \| | V\| |
| 22+45 | 1.8057 | 0.18 | Q | \| | \| | \| | V\| |
| 22+50 | 1.8070 | 0.18 | Q | \| | \| | \| | V\| |
| 22+55 | 1.8082 | 0.18 | Q | \| | \| | \| | V\| |
| 23+ 0 | 1.8094 | 0.18 | Q | \| | \| | \| | V\| |
| 23+ 5 | 1.8106 | 0.18 | Q | \| | \| | \| | V\| |
| 23+10 | 1.8118 | 0.18 | Q | \| | \| | \| | V\| |
| 23+15 | 1.8130 | 0.18 | Q | \| | \| | \| | V\| |
| 23+20 | 1.8143 | 0.18 | Q | \| | \| | \| | V\| |
| 23+25 | 1.8155 | 0.18 | Q | \| | \| | \| | V\| |
| 23+30 | 1.8167 | 0.18 | Q | \| | \| | \| | V\| |
| 23+35 | 1.8179 | 0.18 | Q | \| | \| | \| | V\| |
| 23+40 | 1.8191 | 0.18 | Q | \| | \| | \| | V\| |
| 23+45 | 1.8203 | 0.18 | Q | \| | \| | \| | V\| |
| 23+50 | 1.8216 | 0.18 | Q | \| | \| | \| | V\| |
| 23+55 | 1.8228 | 0.18 | Q | \| | \| | \| | V\| |
| 24+ 0 | 1.8240 | 0.18 | Q | \| | \| | \| | V\| |
| 24+ 5 | 1.8246 | 0.09 | Q | \| | \| | \| | V\| |
| 24+10 | 1.8248 | 0.02 | Q | \| | \| | \| | V\| |
| 24+15 | 1.8248 | 0.01 | Q | \| | \| | \| | V\| |

**BASIN A**

**TABLE 1A - Basin Underdrain**

**Orfice Equation** $Q = CA(2gh)^{0.5}$

| | | |
|---|---|---|
| **Diameter of Holes** | 1.5 | inches |
| **Area of Hole** | 0.049087 | sq ft |
| **Number of Holes per Row** | 1 | |
| **Area of Holes per Row** | 0.049087 | |
| **Orfice Coeffcient** | 0.66 | |
| **Invert Elevation of Outlet** | 1529.5 | |

| $Q_{TOTAL}$ | $Q_1$ | WSE | H | h1 |
|---|---|---|---|---|
| 0.1720 | 0.1720 | 1530.00 | 0.50 | 0.44 |
| 0.3117 | 0.3117 | 1531.00 | 1.50 | 1.44 |
| 0.4059 | 0.4059 | 1532.00 | 2.50 | 2.44 |
| 0.4820 | 0.4820 | 1533.00 | 3.50 | 3.44 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

**TABLE 2A - OUTLET STRUCTURE WEIR**

**Weir Equation** $Q = CLH^{3/2}$

| | |
|---|---|
| **Length of Opening (Weir 1)** | 5 |
| **Length of Opening (Weir 2)** | 0 |
| **Length of Opening (Weir 3)** | 0 |
| **Weir Coeffcient** | 3 |
| **Invert Elevation of Weir 1** | 1531 |
| **Invert Elevation of Weir 2** | 0 |
| **Invert Elevation of Weir 3** | 0 |

| $Q_{TOTAL}$ | $Q_1$ | WSE | H1 |
|---|---|---|---|
| 15.00 | 15.00 | 1532.00 | 1.00 |
| | | | |
| | | | |
| | | | |
| | | | |

**TABLE 2B - OUTLET STRUCTURE WEIR SUBMERGED**

**Orfice Equation** $Q = CA(2gh)^{0.5}$

| | |
|---|---|
| **Length of Opening (Weir 1)** | 5 |
| **Height of Opening (Weir 1)** | 1.00 |
| **Length of Opening (Weir 2)** | 0 |
| **Height of Opening (Weir 2)** | 0 |
| **Length of Opening (Weir 3)** | 0 |
| **Height of Opening (Weir 3)** | 0 |
| **Area of Opening (Weir 1)** | 5 |
| **Area of Opening (Weir 2)** | 0 |
| **Area of Opening (Weir 3)** | 0 |
| **Orfice Coeffcient** | 0.66 |
| **Invert of Opening (Weir 1)** | 1531 |
| **Invert of Opening (Weir 2)** | 0 |
| **Invert of Opening (Weir 3)** | 0 |

| $Q_{TOTAL}$ | $Q_1$ | WSE | H1 | h1 |
|---|---|---|---|---|
| 37.45 | 37.45 | 1533.00 | 2.00 | 1.50 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

**TABLE 3 - TOTAL BASIN OUTFLOW**

**Total Flow Rate for Basin Structure**

| WSE | $Q_{Orifice}$ | $Q_{WEIR}$ | $Q_{WEIR-ORIFICE}$ | $Q_{TOTAL}$ |
|---|---|---|---|---|
| 1530.00 | 0.172 | 0.000 | 0.000 | 0.172 |
| 1531.00 | 0.312 | 0.000 | 0.000 | 0.312 |
| 1532.00 | 0.406 | 15.000 | 0.000 | 15.406 |
| 1533.00 | 0.482 | 0.000 | 37.452 | 37.934 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

## *BASIN STORAGE VOLUME VS. OUTFLOW TABLE*

# Onsite Basin A

| Contour Elevation | Contour Area (sf) | Contour Area (ac) | Contour Interval Volume (ac-ft) | Total Basin Volume (ac-ft) | Total Basin Volume ($ft^3$) | Outflow (cfs) |
|---|---|---|---|---|---|---|
| 1529.50 | 51182.06 | 1.175 | | 0.0000 | | 0 |
| 0.50 | | | 0.616 | | | |
| 1530.00 | 56219.60 | 1.291 | | 0.6162 | 26840.56 | 0.1720 |
| 1.50 | | | 1.349 | | | |
| 1531.00 | 61337.57 | 1.408 | | 1.9651 | 85600.57 | 0.3117 |
| 2.50 | | | 1.467 | | | |
| 1532.00 | 66534.80 | 1.527 | | 3.4325 | 149519.15 | 15.4059 |
| 3.50 | | | 1.588 | | | |
| 1533.00 | 71811.29 | 1.649 | | 5.0201 | 218675.42 | 37.9338 |
| | | | | | | |
| | | | | | | |
| | | | | | | |

## *BASIN ROUTING CALCULATIONS 2-YEAR, 24-HOUR STORM DURATION*

FLOOD HYDROGRAPH ROUTING PROGRAM
Copyright (c) CIVILCADD/CIVILDESIGN, 1989 - 2014
Study date: 10/28/21

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HEMET 30 ONSITE BASIN A ROUTING
2-YEAR, 24-HOUR ROUTING ANALYSIS
FILENAME: BASINA242

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Program License Serial Number 6279

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********** HYDROGRAPH INFORMATION **********

From study/file name: ARA1POST242.rte
**********HYDROGRAPH DATA**********
Number of intervals = 291
Time interval = 5.0 (Min.)
Maximum/Peak flow rate = 3.003 (CFS)
Total volume = 1.825 (Ac.Ft)
Status of hydrographs being held in storage

| | Stream 1 | Stream 2 | Stream 3 | Stream 4 | Stream 5 |
|---|---|---|---|---|---|
| Peak (CFS) | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Vol (Ac.Ft) | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |

**********

++++++++++
Process from Point/Station 1.000 to Point/Station 2.000
**** RETARDING BASIN ROUTING ****
_____

User entry of depth-outflow-storage data
---
Total number of inflow hydrograph intervals = 291
Hydrograph time unit = 5.000 (Min.)
Initial depth in storage basin = 0.00(Ft.)
---
---
Initial basin depth = 0.00 (Ft.)
Initial basin storage = 0.00 (Ac.Ft)
Initial basin outflow = 0.00 (CFS)
---
---
Depth vs. Storage and Depth vs. Discharge data:

| Basin Depth (Ft.) | Storage (Ac.Ft) | Outflow (CFS) | (S-O*dt/2) (Ac.Ft) | (S+O*dt/2) (Ac.Ft) |
|---|---|---|---|---|
| 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 0.500 | 0.616 | 0.172 | 0.615 | 0.617 |
| 1.500 | 1.965 | 0.312 | 1.964 | 1.966 |
| 2.500 | 3.433 | 15.406 | 3.380 | 3.486 |
| 3.500 | 5.020 | 37.934 | 4.889 | 5.151 |

---
Hydrograph Detention Basin Routing
---

Graph values: 'I'= unit inflow; 'O'=outflow at time shown
---

| Time (Hours) | Inflow (CFS) | Outflow (CFS) | Storage (Ac.Ft) | .0 | 0.8 | 1.50 | 2.25 | 3.00 | Depth (Ft.) |
|---|---|---|---|---|---|---|---|---|---|
| 0.083 | 0.08 | 0.00 | 0.000 | O | \| | \| | \| | \| | 0.00 |
| 0.167 | 0.16 | 0.00 | 0.001 | OI | \| | \| | \| | \| | 0.00 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 0.250 | 0.17 | 0.00 | 0.002 | OI | \| | \| | \| | 0.00 |
| 0.333 | 0.22 | 0.00 | 0.004 | O I | \| | \| | \| | 0.00 |
| 0.417 | 0.26 | 0.00 | 0.005 | O I | \| | \| | \| | 0.00 |
| 0.500 | 0.26 | 0.00 | 0.007 | O I | \| | \| | \| | 0.01 |
| 0.583 | 0.26 | 0.00 | 0.009 | O I | \| | \| | \| | 0.01 |
| 0.667 | 0.26 | 0.00 | 0.011 | O I | \| | \| | \| | 0.01 |
| 0.750 | 0.26 | 0.00 | 0.012 | O I | \| | \| | \| | 0.01 |
| 0.833 | 0.31 | 0.00 | 0.014 | O I | \| | \| | \| | 0.01 |
| 0.917 | 0.34 | 0.00 | 0.017 | O I | \| | \| | \| | 0.01 |
| 1.000 | 0.35 | 0.01 | 0.019 | O I | \| | \| | \| | 0.02 |
| 1.083 | 0.31 | 0.01 | 0.021 | O I | \| | \| | \| | 0.02 |
| 1.167 | 0.27 | 0.01 | 0.023 | O I | \| | \| | \| | 0.02 |
| 1.250 | 0.27 | 0.01 | 0.025 | O I | \| | \| | \| | 0.02 |
| 1.333 | 0.26 | 0.01 | 0.027 | O I | \| | \| | \| | 0.02 |
| 1.417 | 0.26 | 0.01 | 0.028 | O I | \| | \| | \| | 0.02 |
| 1.500 | 0.26 | 0.01 | 0.030 | O I | \| | \| | \| | 0.02 |
| 1.583 | 0.26 | 0.01 | 0.032 | O I | \| | \| | \| | 0.03 |
| 1.667 | 0.26 | 0.01 | 0.034 | O I | \| | \| | \| | 0.03 |
| 1.750 | 0.26 | 0.01 | 0.036 | O I | \| | \| | \| | 0.03 |
| 1.833 | 0.31 | 0.01 | 0.037 | O I | \| | \| | \| | 0.03 |
| 1.917 | 0.34 | 0.01 | 0.040 | O I | \| | \| | \| | 0.03 |
| 2.000 | 0.35 | 0.01 | 0.042 | O I | \| | \| | \| | 0.03 |
| 2.083 | 0.35 | 0.01 | 0.044 | O I | \| | \| | \| | 0.04 |
| 2.167 | 0.35 | 0.01 | 0.047 | O I | \| | \| | \| | 0.04 |
| 2.250 | 0.35 | 0.01 | 0.049 | O I | \| | \| | \| | 0.04 |
| 2.333 | 0.35 | 0.01 | 0.051 | O I | \| | \| | \| | 0.04 |
| 2.417 | 0.35 | 0.01 | 0.054 | O I | \| | \| | \| | 0.04 |
| 2.500 | 0.35 | 0.02 | 0.056 | O I | \| | \| | \| | 0.05 |
| 2.583 | 0.40 | 0.02 | 0.058 | O I | \| | \| | \| | 0.05 |
| 2.667 | 0.43 | 0.02 | 0.061 | O I | \| | \| | \| | 0.05 |
| 2.750 | 0.44 | 0.02 | 0.064 | O I | \| | \| | \| | 0.05 |
| 2.833 | 0.44 | 0.02 | 0.067 | O I | \| | \| | \| | 0.05 |
| 2.917 | 0.44 | 0.02 | 0.070 | O I | \| | \| | \| | 0.06 |
| 3.000 | 0.44 | 0.02 | 0.073 | O I | \| | \| | \| | 0.06 |
| 3.083 | 0.44 | 0.02 | 0.076 | O I | \| | \| | \| | 0.06 |
| 3.167 | 0.44 | 0.02 | 0.079 | O I | \| | \| | \| | 0.06 |
| 3.250 | 0.44 | 0.02 | 0.081 | O I | \| | \| | \| | 0.07 |
| 3.333 | 0.44 | 0.02 | 0.084 | O I | \| | \| | \| | 0.07 |
| 3.417 | 0.44 | 0.02 | 0.087 | O I | \| | \| | \| | 0.07 |
| 3.500 | 0.44 | 0.03 | 0.090 | O I | \| | \| | \| | 0.07 |
| 3.583 | 0.44 | 0.03 | 0.093 | O I | \| | \| | \| | 0.08 |
| 3.667 | 0.44 | 0.03 | 0.096 | O I | \| | \| | \| | 0.08 |
| 3.750 | 0.44 | 0.03 | 0.099 | O I | \| | \| | \| | 0.08 |
| 3.833 | 0.48 | 0.03 | 0.102 | O I | \| | \| | \| | 0.08 |
| 3.917 | 0.52 | 0.03 | 0.105 | O I | \| | \| | \| | 0.09 |
| 4.000 | 0.53 | 0.03 | 0.108 | O I | \| | \| | \| | 0.09 |
| 4.083 | 0.53 | 0.03 | 0.112 | O I | \| | \| | \| | 0.09 |
| 4.167 | 0.53 | 0.03 | 0.115 | O I | \| | \| | \| | 0.09 |
| 4.250 | 0.53 | 0.03 | 0.119 | O I | \| | \| | \| | 0.10 |
| 4.333 | 0.57 | 0.03 | 0.122 | O I | \| | \| | \| | 0.10 |
| 4.417 | 0.61 | 0.04 | 0.126 | O I | \| | \| | \| | 0.10 |
| 4.500 | 0.62 | 0.04 | 0.130 | O I | \| | \| | \| | 0.11 |
| 4.583 | 0.62 | 0.04 | 0.134 | O I | \| | \| | \| | 0.11 |
| 4.667 | 0.62 | 0.04 | 0.138 | O I | \| | \| | \| | 0.11 |
| 4.750 | 0.62 | 0.04 | 0.142 | O I | \| | \| | \| | 0.12 |
| 4.833 | 0.66 | 0.04 | 0.146 | O I | \| | \| | \| | 0.12 |
| 4.917 | 0.70 | 0.04 | 0.150 | O I | \| | \| | \| | 0.12 |
| 5.000 | 0.70 | 0.04 | 0.155 | O I | \| | \| | \| | 0.13 |
| 5.083 | 0.62 | 0.04 | 0.159 | O I | \| | \| | \| | 0.13 |
| 5.167 | 0.55 | 0.05 | 0.163 | O I | \| | \| | \| | 0.13 |
| 5.250 | 0.54 | 0.05 | 0.166 | O I | \| | \| | \| | 0.14 |
| 5.333 | 0.57 | 0.05 | 0.170 | O I | \| | \| | \| | 0.14 |
| 5.417 | 0.61 | 0.05 | 0.174 | O I | \| | \| | \| | 0.14 |
| 5.500 | 0.62 | 0.05 | 0.177 | O I | \| | \| | \| | 0.14 |
| 5.583 | 0.66 | 0.05 | 0.182 | O I | \| | \| | \| | 0.15 |
| 5.667 | 0.70 | 0.05 | 0.186 | O I | \| | \| | \| | 0.15 |
| 5.750 | 0.70 | 0.05 | 0.190 | O I | \| | \| | \| | 0.15 |
| 5.833 | 0.71 | 0.05 | 0.195 | O I | \| | \| | \| | 0.16 |
| 5.917 | 0.71 | 0.06 | 0.199 | O I | \| | \| | \| | 0.16 |
| 6.000 | 0.71 | 0.06 | 0.204 | O I | \| | \| | \| | 0.17 |
| 6.083 | 0.75 | 0.06 | 0.208 | O I | \| | \| | \| | 0.17 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 6.167 | 0.79 | 0.06 | 0.213 | O | I | \| | \| | \| | 0.17 |
| 6.250 | 0.79 | 0.06 | 0.218 | O | I | \| | \| | \| | 0.18 |
| 6.333 | 0.79 | 0.06 | 0.223 | O | I | \| | \| | \| | 0.18 |
| 6.417 | 0.79 | 0.06 | 0.228 | O | I | \| | \| | \| | 0.19 |
| 6.500 | 0.79 | 0.07 | 0.233 | O | I | \| | \| | \| | 0.19 |
| 6.583 | 0.84 | 0.07 | 0.239 | O | I | \| | \| | \| | 0.19 |
| 6.667 | 0.87 | 0.07 | 0.244 | O | \|I | \| | \| | \| | 0.20 |
| 6.750 | 0.88 | 0.07 | 0.250 | O | \|I | \| | \| | \| | 0.20 |
| 6.833 | 0.88 | 0.07 | 0.255 | O | \|I | \| | \| | \| | 0.21 |
| 6.917 | 0.88 | 0.07 | 0.261 | O | \|I | \| | \| | \| | 0.21 |
| 7.000 | 0.88 | 0.07 | 0.266 | O | \|I | \| | \| | \| | 0.22 |
| 7.083 | 0.88 | 0.08 | 0.272 | O | \|I | \| | \| | \| | 0.22 |
| 7.167 | 0.88 | 0.08 | 0.277 | O | \|I | \| | \| | \| | 0.23 |
| 7.250 | 0.88 | 0.08 | 0.283 | O | \|I | \| | \| | \| | 0.23 |
| 7.333 | 0.93 | 0.08 | 0.289 | O | \|I | \| | \| | \| | 0.23 |
| 7.417 | 0.96 | 0.08 | 0.295 | O | \| I | \| | \| | \| | 0.24 |
| 7.500 | 0.97 | 0.08 | 0.301 | O | \| I | \| | \| | \| | 0.24 |
| 7.583 | 1.01 | 0.09 | 0.307 | O | \| I | \| | \| | \| | 0.25 |
| 7.667 | 1.05 | 0.09 | 0.313 | O | \|  I | \| | \| | \| | 0.25 |
| 7.750 | 1.06 | 0.09 | 0.320 | O | \|  I | \| | \| | \| | 0.26 |
| 7.833 | 1.10 | 0.09 | 0.327 | O | \|  I | \| | \| | \| | 0.27 |
| 7.917 | 1.14 | 0.09 | 0.334 | O | \|   I | \| | \| | \| | 0.27 |
| 8.000 | 1.15 | 0.10 | 0.341 | \|O | \|   I | \| | \| | \| | 0.28 |
| 8.083 | 1.23 | 0.10 | 0.349 | \|O | \|    I | \| | \| | \| | 0.28 |
| 8.167 | 1.31 | 0.10 | 0.357 | \|O | \|    I | \| | \| | \| | 0.29 |
| 8.250 | 1.32 | 0.10 | 0.365 | \|O | \|     I | \| | \| | \| | 0.30 |
| 8.333 | 1.32 | 0.10 | 0.373 | \|O | \|     I | \| | \| | \| | 0.30 |
| 8.417 | 1.32 | 0.11 | 0.382 | \|O | \|     I | \| | \| | \| | 0.31 |
| 8.500 | 1.32 | 0.11 | 0.390 | \|O | \|     I | \| | \| | \| | 0.32 |
| 8.583 | 1.37 | 0.11 | 0.399 | \|O | \|     I | \| | \| | \| | 0.32 |
| 8.667 | 1.40 | 0.11 | 0.408 | \|O | \|     I | \| | \| | \| | 0.33 |
| 8.750 | 1.41 | 0.12 | 0.416 | \|O | \|      I\| | \| | \| | 0.34 |
| 8.833 | 1.45 | 0.12 | 0.425 | \|O | \|      I\| | \| | \| | 0.35 |
| 8.917 | 1.49 | 0.12 | 0.435 | \|O | \|      I\| | \| | \| | 0.35 |
| 9.000 | 1.50 | 0.12 | 0.444 | \|O | \|      I\| | \| | \| | 0.36 |
| 9.083 | 1.59 | 0.13 | 0.454 | \|O | \|       I | \| | \| | 0.37 |
| 9.167 | 1.66 | 0.13 | 0.464 | \|O | \|       \|I | \| | \| | 0.38 |
| 9.250 | 1.67 | 0.13 | 0.475 | \|O | \|       \|I | \| | \| | 0.39 |
| 9.333 | 1.72 | 0.14 | 0.486 | \|O | \|        \| I | \| | \| | 0.39 |
| 9.417 | 1.76 | 0.14 | 0.497 | \|O | \|        \| I | \| | \| | 0.40 |
| 9.500 | 1.76 | 0.14 | 0.508 | \|O | \|        \| I | \| | \| | 0.41 |
| 9.583 | 1.81 | 0.14 | 0.519 | \|O | \|        \|  I | \| | \| | 0.42 |
| 9.667 | 1.85 | 0.15 | 0.531 | \|O | \|        \|  I | \| | \| | 0.43 |
| 9.750 | 1.85 | 0.15 | 0.542 | \|O | \|        \|  I | \| | \| | 0.44 |
| 9.833 | 1.90 | 0.15 | 0.554 | \|O | \|        \|   I | \| | \| | 0.45 |
| 9.917 | 1.93 | 0.16 | 0.566 | \|O | \|        \|   I | \| | \| | 0.46 |
| 10.000 | 1.94 | 0.16 | 0.579 | \|O | \|        \|   I | \| | \| | 0.47 |
| 10.083 | 1.65 | 0.16 | 0.590 | \|O | \|       \|I | \| | \| | 0.48 |
| 10.167 | 1.39 | 0.17 | 0.599 | \|O | \|     I \| | \| | \| | 0.49 |
| 10.250 | 1.34 | 0.17 | 0.607 | \|O | \|     I \| | \| | \| | 0.49 |
| 10.333 | 1.32 | 0.17 | 0.615 | \|O | \|     I \| | \| | \| | 0.50 |
| 10.417 | 1.32 | 0.17 | 0.623 | \|O | \|     I \| | \| | \| | 0.51 |
| 10.500 | 1.32 | 0.17 | 0.631 | \|O | \|     I \| | \| | \| | 0.51 |
| 10.583 | 1.53 | 0.17 | 0.640 | \|O | \|       I | \| | \| | 0.52 |
| 10.667 | 1.72 | 0.18 | 0.650 | \|O | \|        \| I | \| | \| | 0.53 |
| 10.750 | 1.75 | 0.18 | 0.661 | \|O | \|        \| I | \| | \| | 0.53 |
| 10.833 | 1.77 | 0.18 | 0.672 | \|O | \|        \| I | \| | \| | 0.54 |
| 10.917 | 1.77 | 0.18 | 0.683 | \|O | \|        \| I | \| | \| | 0.55 |
| 11.000 | 1.77 | 0.18 | 0.693 | \|O | \|        \| I | \| | \| | 0.56 |
| 11.083 | 1.72 | 0.18 | 0.704 | \|O | \|        \| I | \| | \| | 0.57 |
| 11.167 | 1.69 | 0.18 | 0.715 | \|O | \|        \|I | \| | \| | 0.57 |
| 11.250 | 1.68 | 0.18 | 0.725 | \|O | \|        \|I | \| | \| | 0.58 |
| 11.333 | 1.68 | 0.18 | 0.735 | \|O | \|        \|I | \| | \| | 0.59 |
| 11.417 | 1.68 | 0.19 | 0.746 | \|O | \|        \|I | \| | \| | 0.60 |
| 11.500 | 1.68 | 0.19 | 0.756 | \|O | \|        \|I | \| | \| | 0.60 |
| 11.583 | 1.59 | 0.19 | 0.766 | \|O | \|        I | \| | \| | 0.61 |
| 11.667 | 1.52 | 0.19 | 0.775 | \| O | \|        I | \| | \| | 0.62 |
| 11.750 | 1.51 | 0.19 | 0.784 | \| O | \|        I | \| | \| | 0.62 |
| 11.833 | 1.54 | 0.19 | 0.794 | \| O | \|        I | \| | \| | 0.63 |
| 11.917 | 1.58 | 0.19 | 0.803 | \| O | \|        I | \| | \| | 0.64 |
| 12.000 | 1.59 | 0.19 | 0.813 | \| O | \|        I | \| | \| | 0.65 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 12.083 | 1.88 | 0.19 | 0.823 | O | | I | | 0.65 |
| 12.167 | 2.14 | 0.19 | 0.836 | O | | I | | 0.66 |
| 12.250 | 2.19 | 0.20 | 0.849 | O | | I | | 0.67 |
| 12.333 | 2.25 | 0.20 | 0.863 | O | | I | | 0.68 |
| 12.417 | 2.29 | 0.20 | 0.878 | O | | I | | 0.69 |
| 12.500 | 2.29 | 0.20 | 0.892 | O | | I | | 0.70 |
| 12.583 | 2.38 | 0.20 | 0.907 | O | | I | | 0.72 |
| 12.667 | 2.45 | 0.20 | 0.922 | O | | I | | 0.73 |
| 12.750 | 2.47 | 0.21 | 0.937 | O | | I | | 0.74 |
| 12.833 | 2.51 | 0.21 | 0.953 | O | | I | | 0.75 |
| 12.917 | 2.55 | 0.21 | 0.969 | O | | I | | 0.76 |
| 13.000 | 2.56 | 0.21 | 0.985 | O | | I | | 0.77 |
| 13.083 | 2.77 | 0.21 | 1.002 | O | | I | | 0.79 |
| 13.167 | 2.95 | 0.21 | 1.020 | O | | I | | 0.80 |
| 13.250 | 2.99 | 0.22 | 1.039 | O | | I | | 0.81 |
| 13.333 | 3.00 | 0.22 | 1.059 | O | | I | | 0.83 |
| 13.417 | 3.00 | 0.22 | 1.078 | O | | I | | 0.84 |
| 13.500 | 3.00 | 0.22 | 1.097 | O | | I | | 0.86 |
| 13.583 | 2.54 | 0.22 | 1.115 | O | | I | | 0.87 |
| 13.667 | 2.14 | 0.23 | 1.129 | O | | I | | 0.88 |
| 13.750 | 2.06 | 0.23 | 1.142 | O | | I | | 0.89 |
| 13.833 | 2.03 | 0.23 | 1.155 | O | | I | | 0.90 |
| 13.917 | 2.03 | 0.23 | 1.167 | O | | I | | 0.91 |
| 14.000 | 2.03 | 0.23 | 1.179 | O | | I | | 0.92 |
| 14.083 | 2.20 | 0.23 | 1.192 | O | | I | | 0.93 |
| 14.167 | 2.35 | 0.23 | 1.206 | O | | I | | 0.94 |
| 14.250 | 2.37 | 0.23 | 1.221 | O | | I | | 0.95 |
| 14.333 | 2.34 | 0.24 | 1.236 | O | | I | | 0.96 |
| 14.417 | 2.31 | 0.24 | 1.250 | O | | I | | 0.97 |
| 14.500 | 2.30 | 0.24 | 1.264 | O | | I | | 0.98 |
| 14.583 | 2.30 | 0.24 | 1.278 | O | | I | | 0.99 |
| 14.667 | 2.30 | 0.24 | 1.293 | O | | I | | 1.00 |
| 14.750 | 2.30 | 0.24 | 1.307 | O | | I | | 1.01 |
| 14.833 | 2.25 | 0.25 | 1.321 | O | | I | | 1.02 |
| 14.917 | 2.22 | 0.25 | 1.334 | O | | I | | 1.03 |
| 15.000 | 2.21 | 0.25 | 1.348 | O | | I | | 1.04 |
| 15.083 | 2.17 | 0.25 | 1.361 | O | | I | | 1.05 |
| 15.167 | 2.13 | 0.25 | 1.374 | O | | I | | 1.06 |
| 15.250 | 2.12 | 0.25 | 1.387 | O | | I | | 1.07 |
| 15.333 | 2.08 | 0.25 | 1.400 | O | | I | | 1.08 |
| 15.417 | 2.04 | 0.25 | 1.412 | O | | I | | 1.09 |
| 15.500 | 2.03 | 0.26 | 1.425 | O | | I | | 1.10 |
| 15.583 | 1.86 | 0.26 | 1.436 | O | | I | | 1.11 |
| 15.667 | 1.72 | 0.26 | 1.447 | O | | I | | 1.12 |
| 15.750 | 1.69 | 0.26 | 1.457 | O | | I | | 1.12 |
| 15.833 | 1.68 | 0.26 | 1.467 | O | | I | | 1.13 |
| 15.917 | 1.68 | 0.26 | 1.476 | O | | I | | 1.14 |
| 16.000 | 1.68 | 0.26 | 1.486 | O | | I | | 1.15 |
| 16.083 | 1.05 | 0.26 | 1.494 | O | I | | | 1.15 |
| 16.167 | 0.50 | 0.26 | 1.497 | O I | | | | 1.15 |
| 16.250 | 0.39 | 0.26 | 1.499 | O I | | | | 1.15 |
| 16.333 | 0.35 | 0.26 | 1.499 | OI | | | | 1.15 |
| 16.417 | 0.35 | 0.26 | 1.500 | OI | | | | 1.16 |
| 16.500 | 0.35 | 0.26 | 1.501 | OI | | | | 1.16 |
| 16.583 | 0.31 | 0.26 | 1.501 | OI | | | | 1.16 |
| 16.667 | 0.27 | 0.26 | 1.501 | O | | | | 1.16 |
| 16.750 | 0.27 | 0.26 | 1.501 | O | | | | 1.16 |
| 16.833 | 0.26 | 0.26 | 1.501 | O | | | | 1.16 |
| 16.917 | 0.26 | 0.26 | 1.501 | O | | | | 1.16 |
| 17.000 | 0.26 | 0.26 | 1.501 | O | | | | 1.16 |
| 17.083 | 0.35 | 0.26 | 1.502 | OI | | | | 1.16 |
| 17.167 | 0.42 | 0.26 | 1.502 | O I | | | | 1.16 |
| 17.250 | 0.44 | 0.26 | 1.504 | O I | | | | 1.16 |
| 17.333 | 0.44 | 0.26 | 1.505 | O I | | | | 1.16 |
| 17.417 | 0.44 | 0.26 | 1.506 | O I | | | | 1.16 |
| 17.500 | 0.44 | 0.26 | 1.507 | O I | | | | 1.16 |
| 17.583 | 0.44 | 0.26 | 1.508 | O I | | | | 1.16 |
| 17.667 | 0.44 | 0.26 | 1.510 | O I | | | | 1.16 |
| 17.750 | 0.44 | 0.26 | 1.511 | O I | | | | 1.16 |
| 17.833 | 0.40 | 0.26 | 1.512 | O I | | | | 1.16 |
| 17.917 | 0.36 | 0.27 | 1.513 | OI | | | | 1.16 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 18.000 | 0.36 | 0.27 | 1.513 | OI | | | | 1.17 |
| 18.083 | 0.35 | 0.27 | 1.514 | OI | | | | 1.17 |
| 18.167 | 0.35 | 0.27 | 1.515 | OI | | | | 1.17 |
| 18.250 | 0.35 | 0.27 | 1.515 | OI | | | | 1.17 |
| 18.333 | 0.35 | 0.27 | 1.516 | OI | | | | 1.17 |
| 18.417 | 0.35 | 0.27 | 1.516 | OI | | | | 1.17 |
| 18.500 | 0.35 | 0.27 | 1.517 | OI | | | | 1.17 |
| 18.583 | 0.31 | 0.27 | 1.517 | OI | | | | 1.17 |
| 18.667 | 0.27 | 0.27 | 1.518 | O | | | | 1.17 |
| 18.750 | 0.27 | 0.27 | 1.518 | O | | | | 1.17 |
| 18.833 | 0.22 | 0.27 | 1.518 | O | | | | 1.17 |
| 18.917 | 0.19 | 0.27 | 1.517 | IO | | | | 1.17 |
| 19.000 | 0.18 | 0.27 | 1.517 | IO | | | | 1.17 |
| 19.083 | 0.22 | 0.27 | 1.516 | O | | | | 1.17 |
| 19.167 | 0.26 | 0.27 | 1.516 | O | | | | 1.17 |
| 19.250 | 0.26 | 0.27 | 1.516 | O | | | | 1.17 |
| 19.333 | 0.31 | 0.27 | 1.516 | OI | | | | 1.17 |
| 19.417 | 0.34 | 0.27 | 1.516 | OI | | | | 1.17 |
| 19.500 | 0.35 | 0.27 | 1.517 | OI | | | | 1.17 |
| 19.583 | 0.31 | 0.27 | 1.517 | OI | | | | 1.17 |
| 19.667 | 0.27 | 0.27 | 1.518 | O | | | | 1.17 |
| 19.750 | 0.27 | 0.27 | 1.518 | O | | | | 1.17 |
| 19.833 | 0.22 | 0.27 | 1.518 | O | | | | 1.17 |
| 19.917 | 0.19 | 0.27 | 1.517 | IO | | | | 1.17 |
| 20.000 | 0.18 | 0.27 | 1.517 | IO | | | | 1.17 |
| 20.083 | 0.22 | 0.27 | 1.516 | O | | | | 1.17 |
| 20.167 | 0.26 | 0.27 | 1.516 | O | | | | 1.17 |
| 20.250 | 0.26 | 0.27 | 1.516 | O | | | | 1.17 |
| 20.333 | 0.26 | 0.27 | 1.516 | O | | | | 1.17 |
| 20.417 | 0.26 | 0.27 | 1.516 | O | | | | 1.17 |
| 20.500 | 0.26 | 0.27 | 1.516 | O | | | | 1.17 |
| 20.583 | 0.26 | 0.27 | 1.516 | O | | | | 1.17 |
| 20.667 | 0.26 | 0.27 | 1.516 | O | | | | 1.17 |
| 20.750 | 0.26 | 0.27 | 1.516 | O | | | | 1.17 |
| 20.833 | 0.22 | 0.27 | 1.516 | O | | | | 1.17 |
| 20.917 | 0.19 | 0.27 | 1.515 | IO | | | | 1.17 |
| 21.000 | 0.18 | 0.27 | 1.515 | IO | | | | 1.17 |
| 21.083 | 0.22 | 0.27 | 1.514 | O | | | | 1.17 |
| 21.167 | 0.26 | 0.27 | 1.514 | O | | | | 1.17 |
| 21.250 | 0.26 | 0.27 | 1.514 | O | | | | 1.17 |
| 21.333 | 0.22 | 0.27 | 1.514 | O | | | | 1.17 |
| 21.417 | 0.19 | 0.27 | 1.513 | IO | | | | 1.17 |
| 21.500 | 0.18 | 0.27 | 1.513 | IO | | | | 1.16 |
| 21.583 | 0.22 | 0.27 | 1.512 | O | | | | 1.16 |
| 21.667 | 0.26 | 0.27 | 1.512 | O | | | | 1.16 |
| 21.750 | 0.26 | 0.27 | 1.512 | O | | | | 1.16 |
| 21.833 | 0.22 | 0.26 | 1.512 | O | | | | 1.16 |
| 21.917 | 0.19 | 0.26 | 1.512 | IO | | | | 1.16 |
| 22.000 | 0.18 | 0.26 | 1.511 | IO | | | | 1.16 |
| 22.083 | 0.22 | 0.26 | 1.511 | O | | | | 1.16 |
| 22.167 | 0.26 | 0.26 | 1.510 | O | | | | 1.16 |
| 22.250 | 0.26 | 0.26 | 1.510 | O | | | | 1.16 |
| 22.333 | 0.22 | 0.26 | 1.510 | O | | | | 1.16 |
| 22.417 | 0.19 | 0.26 | 1.510 | IO | | | | 1.16 |
| 22.500 | 0.18 | 0.26 | 1.509 | IO | | | | 1.16 |
| 22.583 | 0.18 | 0.26 | 1.509 | IO | | | | 1.16 |
| 22.667 | 0.18 | 0.26 | 1.508 | IO | | | | 1.16 |
| 22.750 | 0.18 | 0.26 | 1.507 | IO | | | | 1.16 |
| 22.833 | 0.18 | 0.26 | 1.507 | IO | | | | 1.16 |
| 22.917 | 0.18 | 0.26 | 1.506 | IO | | | | 1.16 |
| 23.000 | 0.18 | 0.26 | 1.506 | IO | | | | 1.16 |
| 23.083 | 0.18 | 0.26 | 1.505 | IO | | | | 1.16 |
| 23.167 | 0.18 | 0.26 | 1.504 | IO | | | | 1.16 |
| 23.250 | 0.18 | 0.26 | 1.504 | IO | | | | 1.16 |
| 23.333 | 0.18 | 0.26 | 1.503 | IO | | | | 1.16 |
| 23.417 | 0.18 | 0.26 | 1.503 | IO | | | | 1.16 |
| 23.500 | 0.18 | 0.26 | 1.502 | IO | | | | 1.16 |
| 23.583 | 0.18 | 0.26 | 1.501 | IO | | | | 1.16 |
| 23.667 | 0.18 | 0.26 | 1.501 | IO | | | | 1.16 |
| 23.750 | 0.18 | 0.26 | 1.500 | IO | | | | 1.16 |
| 23.833 | 0.18 | 0.26 | 1.500 | IO | | | | 1.15 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 23.917 | 0.18 | 0.26 | 1.499 | \|IO | \| | \| | \| | 1.15 |
| 24.000 | 0.18 | 0.26 | 1.498 | \|IO | \| | \| | \| | 1.15 |
| 24.083 | 0.09 | 0.26 | 1.497 | I O | \| | \| | \| | 1.15 |
| 24.167 | 0.02 | 0.26 | 1.496 | I O | \| | \| | \| | 1.15 |
| 24.250 | 0.01 | 0.26 | 1.494 | I O | \| | \| | \| | 1.15 |
| 24.333 | 0.00 | 0.26 | 1.493 | I O | \| | \| | \| | 1.15 |
| 24.417 | 0.00 | 0.26 | 1.491 | I O | \| | \| | \| | 1.15 |
| 24.500 | 0.00 | 0.26 | 1.489 | I O | \| | \| | \| | 1.15 |
| 24.583 | 0.00 | 0.26 | 1.487 | I O | \| | \| | \| | 1.15 |
| 24.667 | 0.00 | 0.26 | 1.485 | I O | \| | \| | \| | 1.14 |
| 24.750 | 0.00 | 0.26 | 1.483 | I O | \| | \| | \| | 1.14 |
| 24.833 | 0.00 | 0.26 | 1.482 | I O | \| | \| | \| | 1.14 |
| 24.917 | 0.00 | 0.26 | 1.480 | I O | \| | \| | \| | 1.14 |
| 25.000 | 0.00 | 0.26 | 1.478 | I O | \| | \| | \| | 1.14 |
| 25.083 | 0.00 | 0.26 | 1.476 | I O | \| | \| | \| | 1.14 |
| 25.167 | 0.00 | 0.26 | 1.474 | I O | \| | \| | \| | 1.14 |
| 25.250 | 0.00 | 0.26 | 1.473 | I O | \| | \| | \| | 1.14 |
| 25.333 | 0.00 | 0.26 | 1.471 | I O | \| | \| | \| | 1.13 |
| 25.417 | 0.00 | 0.26 | 1.469 | I O | \| | \| | \| | 1.13 |
| 25.500 | 0.00 | 0.26 | 1.467 | I O | \| | \| | \| | 1.13 |
| 25.583 | 0.00 | 0.26 | 1.466 | I O | \| | \| | \| | 1.13 |
| 25.667 | 0.00 | 0.26 | 1.464 | I O | \| | \| | \| | 1.13 |
| 25.750 | 0.00 | 0.26 | 1.462 | I O | \| | \| | \| | 1.13 |
| 25.833 | 0.00 | 0.26 | 1.460 | I O | \| | \| | \| | 1.13 |
| 25.917 | 0.00 | 0.26 | 1.458 | I O | \| | \| | \| | 1.12 |
| 26.000 | 0.00 | 0.26 | 1.457 | I O | \| | \| | \| | 1.12 |
| 26.083 | 0.00 | 0.26 | 1.455 | I O | \| | \| | \| | 1.12 |
| 26.167 | 0.00 | 0.26 | 1.453 | I O | \| | \| | \| | 1.12 |
| 26.250 | 0.00 | 0.26 | 1.451 | I O | \| | \| | \| | 1.12 |
| 26.333 | 0.00 | 0.26 | 1.449 | I O | \| | \| | \| | 1.12 |
| 26.417 | 0.00 | 0.26 | 1.448 | I O | \| | \| | \| | 1.12 |
| 26.500 | 0.00 | 0.26 | 1.446 | I O | \| | \| | \| | 1.12 |
| 26.583 | 0.00 | 0.26 | 1.444 | I O | \| | \| | \| | 1.11 |
| 26.667 | 0.00 | 0.26 | 1.442 | I O | \| | \| | \| | 1.11 |
| 26.750 | 0.00 | 0.26 | 1.441 | I O | \| | \| | \| | 1.11 |
| 26.833 | 0.00 | 0.26 | 1.439 | I O | \| | \| | \| | 1.11 |
| 26.917 | 0.00 | 0.26 | 1.437 | I O | \| | \| | \| | 1.11 |
| 27.000 | 0.00 | 0.26 | 1.435 | I O | \| | \| | \| | 1.11 |
| 27.083 | 0.00 | 0.26 | 1.433 | I O | \| | \| | \| | 1.11 |
| 27.167 | 0.00 | 0.26 | 1.432 | I O | \| | \| | \| | 1.10 |
| 27.250 | 0.00 | 0.26 | 1.430 | I O | \| | \| | \| | 1.10 |
| 27.333 | 0.00 | 0.26 | 1.428 | I O | \| | \| | \| | 1.10 |
| 27.417 | 0.00 | 0.26 | 1.426 | I O | \| | \| | \| | 1.10 |
| 27.500 | 0.00 | 0.26 | 1.425 | I O | \| | \| | \| | 1.10 |
| 27.583 | 0.00 | 0.26 | 1.423 | I O | \| | \| | \| | 1.10 |
| 27.667 | 0.00 | 0.26 | 1.421 | I O | \| | \| | \| | 1.10 |
| 27.750 | 0.00 | 0.26 | 1.419 | I O | \| | \| | \| | 1.10 |
| 27.833 | 0.00 | 0.26 | 1.418 | I O | \| | \| | \| | 1.09 |
| 27.917 | 0.00 | 0.26 | 1.416 | I O | \| | \| | \| | 1.09 |
| 28.000 | 0.00 | 0.25 | 1.414 | I O | \| | \| | \| | 1.09 |
| 28.083 | 0.00 | 0.25 | 1.412 | I O | \| | \| | \| | 1.09 |
| 28.167 | 0.00 | 0.25 | 1.411 | I O | \| | \| | \| | 1.09 |
| 28.250 | 0.00 | 0.25 | 1.409 | I O | \| | \| | \| | 1.09 |
| 28.333 | 0.00 | 0.25 | 1.407 | I O | \| | \| | \| | 1.09 |
| 28.417 | 0.00 | 0.25 | 1.405 | I O | \| | \| | \| | 1.09 |
| 28.500 | 0.00 | 0.25 | 1.404 | I O | \| | \| | \| | 1.08 |
| 28.583 | 0.00 | 0.25 | 1.402 | I O | \| | \| | \| | 1.08 |
| 28.667 | 0.00 | 0.25 | 1.400 | I O | \| | \| | \| | 1.08 |
| 28.750 | 0.00 | 0.25 | 1.398 | I O | \| | \| | \| | 1.08 |
| 28.833 | 0.00 | 0.25 | 1.397 | I O | \| | \| | \| | 1.08 |
| 28.917 | 0.00 | 0.25 | 1.395 | I O | \| | \| | \| | 1.08 |
| 29.000 | 0.00 | 0.25 | 1.393 | I O | \| | \| | \| | 1.08 |
| 29.083 | 0.00 | 0.25 | 1.391 | I O | \| | \| | \| | 1.07 |
| 29.167 | 0.00 | 0.25 | 1.390 | I O | \| | \| | \| | 1.07 |
| 29.250 | 0.00 | 0.25 | 1.388 | I O | \| | \| | \| | 1.07 |
| 29.333 | 0.00 | 0.25 | 1.386 | I O | \| | \| | \| | 1.07 |
| 29.417 | 0.00 | 0.25 | 1.384 | I O | \| | \| | \| | 1.07 |
| 29.500 | 0.00 | 0.25 | 1.383 | I O | \| | \| | \| | 1.07 |
| 29.583 | 0.00 | 0.25 | 1.381 | I O | \| | \| | \| | 1.07 |
| 29.667 | 0.00 | 0.25 | 1.379 | I O | \| | \| | \| | 1.07 |
| 29.750 | 0.00 | 0.25 | 1.377 | I O | \| | \| | \| | 1.06 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 29.833 | 0.00 | 0.25 | 1.376 | I | O | | | | 1.06 |
| 29.917 | 0.00 | 0.25 | 1.374 | I | O | | | | 1.06 |
| 30.000 | 0.00 | 0.25 | 1.372 | I | O | | | | 1.06 |
| 30.083 | 0.00 | 0.25 | 1.371 | I | O | | | | 1.06 |
| 30.167 | 0.00 | 0.25 | 1.369 | I | O | | | | 1.06 |
| 30.250 | 0.00 | 0.25 | 1.367 | I | O | | | | 1.06 |
| 30.333 | 0.00 | 0.25 | 1.365 | I | O | | | | 1.06 |
| 30.417 | 0.00 | 0.25 | 1.364 | I | O | | | | 1.05 |
| 30.500 | 0.00 | 0.25 | 1.362 | I | O | | | | 1.05 |
| 30.583 | 0.00 | 0.25 | 1.360 | I | O | | | | 1.05 |
| 30.667 | 0.00 | 0.25 | 1.359 | I | O | | | | 1.05 |
| 30.750 | 0.00 | 0.25 | 1.357 | I | O | | | | 1.05 |
| 30.833 | 0.00 | 0.25 | 1.355 | I | O | | | | 1.05 |
| 30.917 | 0.00 | 0.25 | 1.353 | I | O | | | | 1.05 |
| 31.000 | 0.00 | 0.25 | 1.352 | I | O | | | | 1.05 |
| 31.083 | 0.00 | 0.25 | 1.350 | I | O | | | | 1.04 |
| 31.167 | 0.00 | 0.25 | 1.348 | I | O | | | | 1.04 |
| 31.250 | 0.00 | 0.25 | 1.347 | I | O | | | | 1.04 |
| 31.333 | 0.00 | 0.25 | 1.345 | I | O | | | | 1.04 |
| 31.417 | 0.00 | 0.25 | 1.343 | I | O | | | | 1.04 |
| 31.500 | 0.00 | 0.25 | 1.341 | I | O | | | | 1.04 |
| 31.583 | 0.00 | 0.25 | 1.340 | I | O | | | | 1.04 |
| 31.667 | 0.00 | 0.25 | 1.338 | I | O | | | | 1.04 |
| 31.750 | 0.00 | 0.25 | 1.336 | I | O | | | | 1.03 |
| 31.833 | 0.00 | 0.25 | 1.335 | I | O | | | | 1.03 |
| 31.917 | 0.00 | 0.25 | 1.333 | I | O | | | | 1.03 |
| 32.000 | 0.00 | 0.25 | 1.331 | I | O | | | | 1.03 |
| 32.083 | 0.00 | 0.25 | 1.330 | I | O | | | | 1.03 |
| 32.167 | 0.00 | 0.25 | 1.328 | I | O | | | | 1.03 |
| 32.250 | 0.00 | 0.25 | 1.326 | I | O | | | | 1.03 |
| 32.333 | 0.00 | 0.25 | 1.324 | I | O | | | | 1.03 |
| 32.417 | 0.00 | 0.25 | 1.323 | I | O | | | | 1.02 |
| 32.500 | 0.00 | 0.25 | 1.321 | I | O | | | | 1.02 |
| 32.583 | 0.00 | 0.25 | 1.319 | I | O | | | | 1.02 |
| 32.667 | 0.00 | 0.24 | 1.318 | I | O | | | | 1.02 |
| 32.750 | 0.00 | 0.24 | 1.316 | I | O | | | | 1.02 |
| 32.833 | 0.00 | 0.24 | 1.314 | I | O | | | | 1.02 |
| 32.917 | 0.00 | 0.24 | 1.313 | I | O | | | | 1.02 |
| 33.000 | 0.00 | 0.24 | 1.311 | I | O | | | | 1.02 |
| 33.083 | 0.00 | 0.24 | 1.309 | I | O | | | | 1.01 |
| 33.167 | 0.00 | 0.24 | 1.308 | I | O | | | | 1.01 |
| 33.250 | 0.00 | 0.24 | 1.306 | I | O | | | | 1.01 |
| 33.333 | 0.00 | 0.24 | 1.304 | I | O | | | | 1.01 |
| 33.417 | 0.00 | 0.24 | 1.303 | I | O | | | | 1.01 |
| 33.500 | 0.00 | 0.24 | 1.301 | I | O | | | | 1.01 |
| 33.583 | 0.00 | 0.24 | 1.299 | I | O | | | | 1.01 |
| 33.667 | 0.00 | 0.24 | 1.298 | I | O | | | | 1.01 |
| 33.750 | 0.00 | 0.24 | 1.296 | I | O | | | | 1.00 |
| 33.833 | 0.00 | 0.24 | 1.294 | I | O | | | | 1.00 |
| 33.917 | 0.00 | 0.24 | 1.293 | I | O | | | | 1.00 |
| 34.000 | 0.00 | 0.24 | 1.291 | I | O | | | | 1.00 |
| 34.083 | 0.00 | 0.24 | 1.289 | I | O | | | | 1.00 |
| 34.167 | 0.00 | 0.24 | 1.288 | I | O | | | | 1.00 |
| 34.250 | 0.00 | 0.24 | 1.286 | I | O | | | | 1.00 |
| 34.333 | 0.00 | 0.24 | 1.284 | I | O | | | | 1.00 |
| 34.417 | 0.00 | 0.24 | 1.283 | I | O | | | | 0.99 |
| 34.500 | 0.00 | 0.24 | 1.281 | I | O | | | | 0.99 |
| 34.583 | 0.00 | 0.24 | 1.279 | I | O | | | | 0.99 |
| 34.667 | 0.00 | 0.24 | 1.278 | I | O | | | | 0.99 |
| 34.750 | 0.00 | 0.24 | 1.276 | I | O | | | | 0.99 |
| 34.833 | 0.00 | 0.24 | 1.274 | I | O | | | | 0.99 |
| 34.917 | 0.00 | 0.24 | 1.273 | I | O | | | | 0.99 |
| 35.000 | 0.00 | 0.24 | 1.271 | I | O | | | | 0.99 |
| 35.083 | 0.00 | 0.24 | 1.269 | I | O | | | | 0.98 |
| 35.167 | 0.00 | 0.24 | 1.268 | I | O | | | | 0.98 |
| 35.250 | 0.00 | 0.24 | 1.266 | I | O | | | | 0.98 |
| 35.333 | 0.00 | 0.24 | 1.264 | I | O | | | | 0.98 |
| 35.417 | 0.00 | 0.24 | 1.263 | I | O | | | | 0.98 |
| 35.500 | 0.00 | 0.24 | 1.261 | I | O | | | | 0.98 |
| 35.583 | 0.00 | 0.24 | 1.259 | I | O | | | | 0.98 |
| 35.667 | 0.00 | 0.24 | 1.258 | I | O | | | | 0.98 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 35.750 | 0.00 | 0.24 | 1.256 | I | O | | | | 0.97 |
| 35.833 | 0.00 | 0.24 | 1.255 | I | O | | | | 0.97 |
| 35.917 | 0.00 | 0.24 | 1.253 | I | O | | | | 0.97 |
| 36.000 | 0.00 | 0.24 | 1.251 | I | O | | | | 0.97 |
| 36.083 | 0.00 | 0.24 | 1.250 | I | O | | | | 0.97 |
| 36.167 | 0.00 | 0.24 | 1.248 | I | O | | | | 0.97 |
| 36.250 | 0.00 | 0.24 | 1.246 | I | O | | | | 0.97 |
| 36.333 | 0.00 | 0.24 | 1.245 | I | O | | | | 0.97 |
| 36.417 | 0.00 | 0.24 | 1.243 | I | O | | | | 0.96 |
| 36.500 | 0.00 | 0.24 | 1.241 | I | O | | | | 0.96 |
| 36.583 | 0.00 | 0.24 | 1.240 | I | O | | | | 0.96 |
| 36.667 | 0.00 | 0.24 | 1.238 | I | O | | | | 0.96 |
| 36.750 | 0.00 | 0.24 | 1.237 | I | O | | | | 0.96 |
| 36.833 | 0.00 | 0.24 | 1.235 | I | O | | | | 0.96 |
| 36.917 | 0.00 | 0.24 | 1.233 | I | O | | | | 0.96 |
| 37.000 | 0.00 | 0.24 | 1.232 | I | O | | | | 0.96 |
| 37.083 | 0.00 | 0.24 | 1.230 | I | O | | | | 0.96 |
| 37.167 | 0.00 | 0.24 | 1.228 | I | O | | | | 0.95 |
| 37.250 | 0.00 | 0.24 | 1.227 | I | O | | | | 0.95 |
| 37.333 | 0.00 | 0.24 | 1.225 | I | O | | | | 0.95 |
| 37.417 | 0.00 | 0.24 | 1.224 | I | O | | | | 0.95 |
| 37.500 | 0.00 | 0.23 | 1.222 | I | O | | | | 0.95 |
| 37.583 | 0.00 | 0.23 | 1.220 | I | O | | | | 0.95 |
| 37.667 | 0.00 | 0.23 | 1.219 | I | O | | | | 0.95 |
| 37.750 | 0.00 | 0.23 | 1.217 | I | O | | | | 0.95 |
| 37.833 | 0.00 | 0.23 | 1.215 | I | O | | | | 0.94 |
| 37.917 | 0.00 | 0.23 | 1.214 | I | O | | | | 0.94 |
| 38.000 | 0.00 | 0.23 | 1.212 | I | O | | | | 0.94 |
| 38.083 | 0.00 | 0.23 | 1.211 | I | O | | | | 0.94 |
| 38.167 | 0.00 | 0.23 | 1.209 | I | O | | | | 0.94 |
| 38.250 | 0.00 | 0.23 | 1.207 | I | O | | | | 0.94 |
| 38.333 | 0.00 | 0.23 | 1.206 | I | O | | | | 0.94 |
| 38.417 | 0.00 | 0.23 | 1.204 | I | O | | | | 0.94 |
| 38.500 | 0.00 | 0.23 | 1.203 | I | O | | | | 0.93 |
| 38.583 | 0.00 | 0.23 | 1.201 | I | O | | | | 0.93 |
| 38.667 | 0.00 | 0.23 | 1.199 | I | O | | | | 0.93 |
| 38.750 | 0.00 | 0.23 | 1.198 | I | O | | | | 0.93 |
| 38.833 | 0.00 | 0.23 | 1.196 | I | O | | | | 0.93 |
| 38.917 | 0.00 | 0.23 | 1.195 | I | O | | | | 0.93 |
| 39.000 | 0.00 | 0.23 | 1.193 | I | O | | | | 0.93 |
| 39.083 | 0.00 | 0.23 | 1.191 | I | O | | | | 0.93 |
| 39.167 | 0.00 | 0.23 | 1.190 | I | O | | | | 0.93 |
| 39.250 | 0.00 | 0.23 | 1.188 | I | O | | | | 0.92 |
| 39.333 | 0.00 | 0.23 | 1.187 | I | O | | | | 0.92 |
| 39.417 | 0.00 | 0.23 | 1.185 | I | O | | | | 0.92 |
| 39.500 | 0.00 | 0.23 | 1.183 | I | O | | | | 0.92 |
| 39.583 | 0.00 | 0.23 | 1.182 | I | O | | | | 0.92 |
| 39.667 | 0.00 | 0.23 | 1.180 | I | O | | | | 0.92 |
| 39.750 | 0.00 | 0.23 | 1.179 | I | O | | | | 0.92 |
| 39.833 | 0.00 | 0.23 | 1.177 | I | O | | | | 0.92 |
| 39.917 | 0.00 | 0.23 | 1.176 | I | O | | | | 0.91 |
| 40.000 | 0.00 | 0.23 | 1.174 | I | O | | | | 0.91 |
| 40.083 | 0.00 | 0.23 | 1.172 | I | O | | | | 0.91 |
| 40.167 | 0.00 | 0.23 | 1.171 | I | O | | | | 0.91 |
| 40.250 | 0.00 | 0.23 | 1.169 | I | O | | | | 0.91 |
| 40.333 | 0.00 | 0.23 | 1.168 | I | O | | | | 0.91 |
| 40.417 | 0.00 | 0.23 | 1.166 | I | O | | | | 0.91 |
| 40.500 | 0.00 | 0.23 | 1.164 | I | O | | | | 0.91 |
| 40.583 | 0.00 | 0.23 | 1.163 | I | O | | | | 0.91 |
| 40.667 | 0.00 | 0.23 | 1.161 | I | O | | | | 0.90 |
| 40.750 | 0.00 | 0.23 | 1.160 | I | O | | | | 0.90 |
| 40.833 | 0.00 | 0.23 | 1.158 | I | O | | | | 0.90 |
| 40.917 | 0.00 | 0.23 | 1.157 | I | O | | | | 0.90 |
| 41.000 | 0.00 | 0.23 | 1.155 | I | O | | | | 0.90 |
| 41.083 | 0.00 | 0.23 | 1.153 | I | O | | | | 0.90 |
| 41.167 | 0.00 | 0.23 | 1.152 | I | O | | | | 0.90 |
| 41.250 | 0.00 | 0.23 | 1.150 | I | O | | | | 0.90 |
| 41.333 | 0.00 | 0.23 | 1.149 | I | O | | | | 0.89 |
| 41.417 | 0.00 | 0.23 | 1.147 | I | O | | | | 0.89 |
| 41.500 | 0.00 | 0.23 | 1.146 | I | O | | | | 0.89 |
| 41.583 | 0.00 | 0.23 | 1.144 | I | O | | | | 0.89 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 41.667 | 0.00 | 0.23 | 1.142 | I | O | \| | \| | \| | \| 0.89 |
| 41.750 | 0.00 | 0.23 | 1.141 | I | O | \| | \| | \| | \| 0.89 |
| 41.833 | 0.00 | 0.23 | 1.139 | I | O | \| | \| | \| | \| 0.89 |
| 41.917 | 0.00 | 0.23 | 1.138 | I | O | \| | \| | \| | \| 0.89 |
| 42.000 | 0.00 | 0.23 | 1.136 | I | O | \| | \| | \| | \| 0.89 |
| 42.083 | 0.00 | 0.23 | 1.135 | I | O | \| | \| | \| | \| 0.88 |
| 42.167 | 0.00 | 0.23 | 1.133 | I | O | \| | \| | \| | \| 0.88 |
| 42.250 | 0.00 | 0.23 | 1.132 | I | O | \| | \| | \| | \| 0.88 |
| 42.333 | 0.00 | 0.23 | 1.130 | I | O | \| | \| | \| | \| 0.88 |
| 42.417 | 0.00 | 0.23 | 1.128 | I | O | \| | \| | \| | \| 0.88 |
| 42.500 | 0.00 | 0.23 | 1.127 | I | O | \| | \| | \| | \| 0.88 |
| 42.583 | 0.00 | 0.22 | 1.125 | I | O | \| | \| | \| | \| 0.88 |
| 42.667 | 0.00 | 0.22 | 1.124 | I | O | \| | \| | \| | \| 0.88 |
| 42.750 | 0.00 | 0.22 | 1.122 | I | O | \| | \| | \| | \| 0.88 |
| 42.833 | 0.00 | 0.22 | 1.121 | I | O | \| | \| | \| | \| 0.87 |
| 42.917 | 0.00 | 0.22 | 1.119 | I | O | \| | \| | \| | \| 0.87 |
| 43.000 | 0.00 | 0.22 | 1.118 | I | O | \| | \| | \| | \| 0.87 |
| 43.083 | 0.00 | 0.22 | 1.116 | I | O | \| | \| | \| | \| 0.87 |
| 43.167 | 0.00 | 0.22 | 1.115 | I | O | \| | \| | \| | \| 0.87 |
| 43.250 | 0.00 | 0.22 | 1.113 | I | O | \| | \| | \| | \| 0.87 |
| 43.333 | 0.00 | 0.22 | 1.111 | I | O | \| | \| | \| | \| 0.87 |
| 43.417 | 0.00 | 0.22 | 1.110 | I | O | \| | \| | \| | \| 0.87 |
| 43.500 | 0.00 | 0.22 | 1.108 | I | O | \| | \| | \| | \| 0.87 |
| 43.583 | 0.00 | 0.22 | 1.107 | I | O | \| | \| | \| | \| 0.86 |
| 43.667 | 0.00 | 0.22 | 1.105 | I | O | \| | \| | \| | \| 0.86 |
| 43.750 | 0.00 | 0.22 | 1.104 | I | O | \| | \| | \| | \| 0.86 |
| 43.833 | 0.00 | 0.22 | 1.102 | I | O | \| | \| | \| | \| 0.86 |
| 43.917 | 0.00 | 0.22 | 1.101 | I | O | \| | \| | \| | \| 0.86 |
| 44.000 | 0.00 | 0.22 | 1.099 | I | O | \| | \| | \| | \| 0.86 |
| 44.083 | 0.00 | 0.22 | 1.098 | I | O | \| | \| | \| | \| 0.86 |
| 44.167 | 0.00 | 0.22 | 1.096 | I | O | \| | \| | \| | \| 0.86 |
| 44.250 | 0.00 | 0.22 | 1.095 | I | O | \| | \| | \| | \| 0.85 |
| 44.333 | 0.00 | 0.22 | 1.093 | I | O | \| | \| | \| | \| 0.85 |
| 44.417 | 0.00 | 0.22 | 1.092 | I | O | \| | \| | \| | \| 0.85 |
| 44.500 | 0.00 | 0.22 | 1.090 | I | O | \| | \| | \| | \| 0.85 |
| 44.583 | 0.00 | 0.22 | 1.089 | I | O | \| | \| | \| | \| 0.85 |
| 44.667 | 0.00 | 0.22 | 1.087 | I | O | \| | \| | \| | \| 0.85 |
| 44.750 | 0.00 | 0.22 | 1.085 | I | O | \| | \| | \| | \| 0.85 |
| 44.833 | 0.00 | 0.22 | 1.084 | I | O | \| | \| | \| | \| 0.85 |
| 44.917 | 0.00 | 0.22 | 1.082 | I | O | \| | \| | \| | \| 0.85 |
| 45.000 | 0.00 | 0.22 | 1.081 | I | O | \| | \| | \| | \| 0.84 |
| 45.083 | 0.00 | 0.22 | 1.079 | I | O | \| | \| | \| | \| 0.84 |
| 45.167 | 0.00 | 0.22 | 1.078 | I | O | \| | \| | \| | \| 0.84 |
| 45.250 | 0.00 | 0.22 | 1.076 | I | O | \| | \| | \| | \| 0.84 |
| 45.333 | 0.00 | 0.22 | 1.075 | I | O | \| | \| | \| | \| 0.84 |
| 45.417 | 0.00 | 0.22 | 1.073 | I | O | \| | \| | \| | \| 0.84 |
| 45.500 | 0.00 | 0.22 | 1.072 | I | O | \| | \| | \| | \| 0.84 |
| 45.583 | 0.00 | 0.22 | 1.070 | I | O | \| | \| | \| | \| 0.84 |
| 45.667 | 0.00 | 0.22 | 1.069 | I | O | \| | \| | \| | \| 0.84 |
| 45.750 | 0.00 | 0.22 | 1.067 | I | O | \| | \| | \| | \| 0.83 |
| 45.833 | 0.00 | 0.22 | 1.066 | I | O | \| | \| | \| | \| 0.83 |
| 45.917 | 0.00 | 0.22 | 1.064 | I | O | \| | \| | \| | \| 0.83 |
| 46.000 | 0.00 | 0.22 | 1.063 | I | O | \| | \| | \| | \| 0.83 |
| 46.083 | 0.00 | 0.22 | 1.061 | I | O | \| | \| | \| | \| 0.83 |
| 46.167 | 0.00 | 0.22 | 1.060 | I | O | \| | \| | \| | \| 0.83 |
| 46.250 | 0.00 | 0.22 | 1.058 | I | O | \| | \| | \| | \| 0.83 |
| 46.333 | 0.00 | 0.22 | 1.057 | I | O | \| | \| | \| | \| 0.83 |
| 46.417 | 0.00 | 0.22 | 1.055 | I | O | \| | \| | \| | \| 0.83 |
| 46.500 | 0.00 | 0.22 | 1.054 | I | O | \| | \| | \| | \| 0.82 |
| 46.583 | 0.00 | 0.22 | 1.052 | I | O | \| | \| | \| | \| 0.82 |
| 46.667 | 0.00 | 0.22 | 1.051 | I | O | \| | \| | \| | \| 0.82 |
| 46.750 | 0.00 | 0.22 | 1.049 | I | O | \| | \| | \| | \| 0.82 |
| 46.833 | 0.00 | 0.22 | 1.048 | I | O | \| | \| | \| | \| 0.82 |
| 46.917 | 0.00 | 0.22 | 1.046 | I | O | \| | \| | \| | \| 0.82 |
| 47.000 | 0.00 | 0.22 | 1.045 | I | O | \| | \| | \| | \| 0.82 |
| 47.083 | 0.00 | 0.22 | 1.043 | I | O | \| | \| | \| | \| 0.82 |
| 47.167 | 0.00 | 0.22 | 1.042 | I | O | \| | \| | \| | \| 0.82 |
| 47.250 | 0.00 | 0.22 | 1.040 | I | O | \| | \| | \| | \| 0.81 |
| 47.333 | 0.00 | 0.22 | 1.039 | I | O | \| | \| | \| | \| 0.81 |
| 47.417 | 0.00 | 0.22 | 1.037 | I | O | \| | \| | \| | \| 0.81 |
| 47.500 | 0.00 | 0.22 | 1.036 | I | O | \| | \| | \| | \| 0.81 |

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|---|---|---|---|---|---|---|---|---|---|
| 47.583 | 0.00 | 0.22 | 1.034 | I | O | \| | \| | \| | \| 0.81 |
| 47.667 | 0.00 | 0.22 | 1.033 | I | O | \| | \| | \| | \| 0.81 |
| 47.750 | 0.00 | 0.22 | 1.031 | I | O | \| | \| | \| | \| 0.81 |
| 47.833 | 0.00 | 0.21 | 1.030 | I | O | \| | \| | \| | \| 0.81 |
| 47.917 | 0.00 | 0.21 | 1.029 | I | O | \| | \| | \| | \| 0.81 |
| 48.000 | 0.00 | 0.21 | 1.027 | I | O | \| | \| | \| | \| 0.80 |
| 48.083 | 0.00 | 0.21 | 1.026 | I | O | \| | \| | \| | \| 0.80 |
| 48.167 | 0.00 | 0.21 | 1.024 | I | O | \| | \| | \| | \| 0.80 |
| 48.250 | 0.00 | 0.21 | 1.023 | I | O | \| | \| | \| | \| 0.80 |
| 48.333 | 0.00 | 0.21 | 1.021 | I | O | \| | \| | \| | \| 0.80 |
| 48.417 | 0.00 | 0.21 | 1.020 | I | O | \| | \| | \| | \| 0.80 |
| 48.500 | 0.00 | 0.21 | 1.018 | I | O | \| | \| | \| | \| 0.80 |
| 48.583 | 0.00 | 0.21 | 1.017 | I | O | \| | \| | \| | \| 0.80 |
| 48.667 | 0.00 | 0.21 | 1.015 | I | O | \| | \| | \| | \| 0.80 |
| 48.750 | 0.00 | 0.21 | 1.014 | I | O | \| | \| | \| | \| 0.79 |
| 48.833 | 0.00 | 0.21 | 1.012 | I | O | \| | \| | \| | \| 0.79 |
| 48.917 | 0.00 | 0.21 | 1.011 | I | O | \| | \| | \| | \| 0.79 |
| 49.000 | 0.00 | 0.21 | 1.009 | I | O | \| | \| | \| | \| 0.79 |
| 49.083 | 0.00 | 0.21 | 1.008 | I | O | \| | \| | \| | \| 0.79 |
| 49.167 | 0.00 | 0.21 | 1.006 | I | O | \| | \| | \| | \| 0.79 |
| 49.250 | 0.00 | 0.21 | 1.005 | I | O | \| | \| | \| | \| 0.79 |
| 49.333 | 0.00 | 0.21 | 1.004 | I | O | \| | \| | \| | \| 0.79 |
| 49.417 | 0.00 | 0.21 | 1.002 | I | O | \| | \| | \| | \| 0.79 |
| 49.500 | 0.00 | 0.21 | 1.001 | I | O | \| | \| | \| | \| 0.79 |
| 49.583 | 0.00 | 0.21 | 0.999 | I | O | \| | \| | \| | \| 0.78 |
| 49.667 | 0.00 | 0.21 | 0.998 | I | O | \| | \| | \| | \| 0.78 |
| 49.750 | 0.00 | 0.21 | 0.996 | I | O | \| | \| | \| | \| 0.78 |
| 49.833 | 0.00 | 0.21 | 0.995 | I | O | \| | \| | \| | \| 0.78 |
| 49.917 | 0.00 | 0.21 | 0.993 | I | O | \| | \| | \| | \| 0.78 |
| 50.000 | 0.00 | 0.21 | 0.992 | I | O | \| | \| | \| | \| 0.78 |
| 50.083 | 0.00 | 0.21 | 0.990 | I | O | \| | \| | \| | \| 0.78 |
| 50.167 | 0.00 | 0.21 | 0.989 | I | O | \| | \| | \| | \| 0.78 |
| 50.250 | 0.00 | 0.21 | 0.987 | I | O | \| | \| | \| | \| 0.78 |
| 50.333 | 0.00 | 0.21 | 0.986 | I | O | \| | \| | \| | \| 0.77 |
| 50.417 | 0.00 | 0.21 | 0.985 | I | O | \| | \| | \| | \| 0.77 |
| 50.500 | 0.00 | 0.21 | 0.983 | I | O | \| | \| | \| | \| 0.77 |
| 50.583 | 0.00 | 0.21 | 0.982 | I | O | \| | \| | \| | \| 0.77 |
| 50.667 | 0.00 | 0.21 | 0.980 | I | O | \| | \| | \| | \| 0.77 |
| 50.750 | 0.00 | 0.21 | 0.979 | I | O | \| | \| | \| | \| 0.77 |
| 50.833 | 0.00 | 0.21 | 0.977 | I | O | \| | \| | \| | \| 0.77 |
| 50.917 | 0.00 | 0.21 | 0.976 | I | O | \| | \| | \| | \| 0.77 |
| 51.000 | 0.00 | 0.21 | 0.974 | I | O | \| | \| | \| | \| 0.77 |
| 51.083 | 0.00 | 0.21 | 0.973 | I | O | \| | \| | \| | \| 0.76 |
| 51.167 | 0.00 | 0.21 | 0.972 | I | O | \| | \| | \| | \| 0.76 |
| 51.250 | 0.00 | 0.21 | 0.970 | I | O | \| | \| | \| | \| 0.76 |
| 51.333 | 0.00 | 0.21 | 0.969 | I | O | \| | \| | \| | \| 0.76 |
| 51.417 | 0.00 | 0.21 | 0.967 | I | O | \| | \| | \| | \| 0.76 |
| 51.500 | 0.00 | 0.21 | 0.966 | I | O | \| | \| | \| | \| 0.76 |
| 51.583 | 0.00 | 0.21 | 0.964 | I | O | \| | \| | \| | \| 0.76 |
| 51.667 | 0.00 | 0.21 | 0.963 | I | O | \| | \| | \| | \| 0.76 |
| 51.750 | 0.00 | 0.21 | 0.962 | I | O | \| | \| | \| | \| 0.76 |
| 51.833 | 0.00 | 0.21 | 0.960 | I | O | \| | \| | \| | \| 0.76 |
| 51.917 | 0.00 | 0.21 | 0.959 | I | O | \| | \| | \| | \| 0.75 |
| 52.000 | 0.00 | 0.21 | 0.957 | I | O | \| | \| | \| | \| 0.75 |
| 52.083 | 0.00 | 0.21 | 0.956 | I | O | \| | \| | \| | \| 0.75 |
| 52.167 | 0.00 | 0.21 | 0.954 | I | O | \| | \| | \| | \| 0.75 |
| 52.250 | 0.00 | 0.21 | 0.953 | I | O | \| | \| | \| | \| 0.75 |
| 52.333 | 0.00 | 0.21 | 0.952 | I | O | \| | \| | \| | \| 0.75 |
| 52.417 | 0.00 | 0.21 | 0.950 | I | O | \| | \| | \| | \| 0.75 |
| 52.500 | 0.00 | 0.21 | 0.949 | I | O | \| | \| | \| | \| 0.75 |
| 52.583 | 0.00 | 0.21 | 0.947 | I | O | \| | \| | \| | \| 0.75 |
| 52.667 | 0.00 | 0.21 | 0.946 | I | O | \| | \| | \| | \| 0.74 |
| 52.750 | 0.00 | 0.21 | 0.944 | I | O | \| | \| | \| | \| 0.74 |
| 52.833 | 0.00 | 0.21 | 0.943 | I | O | \| | \| | \| | \| 0.74 |
| 52.917 | 0.00 | 0.21 | 0.942 | I | O | \| | \| | \| | \| 0.74 |
| 53.000 | 0.00 | 0.21 | 0.940 | I | O | \| | \| | \| | \| 0.74 |
| 53.083 | 0.00 | 0.21 | 0.939 | I | O | \| | \| | \| | \| 0.74 |
| 53.167 | 0.00 | 0.21 | 0.937 | I | O | \| | \| | \| | \| 0.74 |
| 53.250 | 0.00 | 0.21 | 0.936 | I | O | \| | \| | \| | \| 0.74 |
| 53.333 | 0.00 | 0.21 | 0.935 | I | O | \| | \| | \| | \| 0.74 |
| 53.417 | 0.00 | 0.20 | 0.933 | I | O | \| | \| | \| | \| 0.74 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 53.500 | 0.00 | 0.20 | 0.932 | I | O | | | | 0.73 |
| 53.583 | 0.00 | 0.20 | 0.930 | I | O | | | | 0.73 |
| 53.667 | 0.00 | 0.20 | 0.929 | I | O | | | | 0.73 |
| 53.750 | 0.00 | 0.20 | 0.927 | I | O | | | | 0.73 |
| 53.833 | 0.00 | 0.20 | 0.926 | I | O | | | | 0.73 |
| 53.917 | 0.00 | 0.20 | 0.925 | I | O | | | | 0.73 |
| 54.000 | 0.00 | 0.20 | 0.923 | I | O | | | | 0.73 |
| 54.083 | 0.00 | 0.20 | 0.922 | I | O | | | | 0.73 |
| 54.167 | 0.00 | 0.20 | 0.920 | I | O | | | | 0.73 |
| 54.250 | 0.00 | 0.20 | 0.919 | I | O | | | | 0.72 |
| 54.333 | 0.00 | 0.20 | 0.918 | I | O | | | | 0.72 |
| 54.417 | 0.00 | 0.20 | 0.916 | I | O | | | | 0.72 |
| 54.500 | 0.00 | 0.20 | 0.915 | I | O | | | | 0.72 |
| 54.583 | 0.00 | 0.20 | 0.913 | I | O | | | | 0.72 |
| 54.667 | 0.00 | 0.20 | 0.912 | I | O | | | | 0.72 |
| 54.750 | 0.00 | 0.20 | 0.911 | I | O | | | | 0.72 |
| 54.833 | 0.00 | 0.20 | 0.909 | I | O | | | | 0.72 |
| 54.917 | 0.00 | 0.20 | 0.908 | I | O | | | | 0.72 |
| 55.000 | 0.00 | 0.20 | 0.906 | I | O | | | | 0.72 |
| 55.083 | 0.00 | 0.20 | 0.905 | I | O | | | | 0.71 |
| 55.167 | 0.00 | 0.20 | 0.904 | I | O | | | | 0.71 |
| 55.250 | 0.00 | 0.20 | 0.902 | I | O | | | | 0.71 |
| 55.333 | 0.00 | 0.20 | 0.901 | I | O | | | | 0.71 |
| 55.417 | 0.00 | 0.20 | 0.900 | I | O | | | | 0.71 |
| 55.500 | 0.00 | 0.20 | 0.898 | I | O | | | | 0.71 |
| 55.583 | 0.00 | 0.20 | 0.897 | I | O | | | | 0.71 |
| 55.667 | 0.00 | 0.20 | 0.895 | I | O | | | | 0.71 |
| 55.750 | 0.00 | 0.20 | 0.894 | I | O | | | | 0.71 |
| 55.833 | 0.00 | 0.20 | 0.893 | I | O | | | | 0.71 |
| 55.917 | 0.00 | 0.20 | 0.891 | I | O | | | | 0.70 |
| 56.000 | 0.00 | 0.20 | 0.890 | I | O | | | | 0.70 |
| 56.083 | 0.00 | 0.20 | 0.888 | I | O | | | | 0.70 |
| 56.167 | 0.00 | 0.20 | 0.887 | I | O | | | | 0.70 |
| 56.250 | 0.00 | 0.20 | 0.886 | I | O | | | | 0.70 |
| 56.333 | 0.00 | 0.20 | 0.884 | I | O | | | | 0.70 |
| 56.417 | 0.00 | 0.20 | 0.883 | I | O | | | | 0.70 |
| 56.500 | 0.00 | 0.20 | 0.882 | I | O | | | | 0.70 |
| 56.583 | 0.00 | 0.20 | 0.880 | I | O | | | | 0.70 |
| 56.667 | 0.00 | 0.20 | 0.879 | I | O | | | | 0.69 |
| 56.750 | 0.00 | 0.20 | 0.877 | I | O | | | | 0.69 |
| 56.833 | 0.00 | 0.20 | 0.876 | I | O | | | | 0.69 |
| 56.917 | 0.00 | 0.20 | 0.875 | I | O | | | | 0.69 |
| 57.000 | 0.00 | 0.20 | 0.873 | I | O | | | | 0.69 |
| 57.083 | 0.00 | 0.20 | 0.872 | I | O | | | | 0.69 |
| 57.167 | 0.00 | 0.20 | 0.871 | I | O | | | | 0.69 |
| 57.250 | 0.00 | 0.20 | 0.869 | I | O | | | | 0.69 |
| 57.333 | 0.00 | 0.20 | 0.868 | I | O | | | | 0.69 |
| 57.417 | 0.00 | 0.20 | 0.867 | I | O | | | | 0.69 |
| 57.500 | 0.00 | 0.20 | 0.865 | I | O | | | | 0.68 |
| 57.583 | 0.00 | 0.20 | 0.864 | I | O | | | | 0.68 |
| 57.667 | 0.00 | 0.20 | 0.862 | I | O | | | | 0.68 |
| 57.750 | 0.00 | 0.20 | 0.861 | I | O | | | | 0.68 |
| 57.833 | 0.00 | 0.20 | 0.860 | I | O | | | | 0.68 |
| 57.917 | 0.00 | 0.20 | 0.858 | I | O | | | | 0.68 |
| 58.000 | 0.00 | 0.20 | 0.857 | I | O | | | | 0.68 |
| 58.083 | 0.00 | 0.20 | 0.856 | I | O | | | | 0.68 |
| 58.167 | 0.00 | 0.20 | 0.854 | I | O | | | | 0.68 |
| 58.250 | 0.00 | 0.20 | 0.853 | I | O | | | | 0.68 |
| 58.333 | 0.00 | 0.20 | 0.852 | I | O | | | | 0.67 |
| 58.417 | 0.00 | 0.20 | 0.850 | I | O | | | | 0.67 |
| 58.500 | 0.00 | 0.20 | 0.849 | I | O | | | | 0.67 |
| 58.583 | 0.00 | 0.20 | 0.848 | I | O | | | | 0.67 |
| 58.667 | 0.00 | 0.20 | 0.846 | I | O | | | | 0.67 |
| 58.750 | 0.00 | 0.20 | 0.845 | I | O | | | | 0.67 |
| 58.833 | 0.00 | 0.20 | 0.843 | I | O | | | | 0.67 |
| 58.917 | 0.00 | 0.20 | 0.842 | I | O | | | | 0.67 |
| 59.000 | 0.00 | 0.20 | 0.841 | I | O | | | | 0.67 |
| 59.083 | 0.00 | 0.20 | 0.839 | I | O | | | | 0.67 |
| 59.167 | 0.00 | 0.20 | 0.838 | I | O | | | | 0.66 |
| 59.250 | 0.00 | 0.19 | 0.837 | I | O | | | | 0.66 |
| 59.333 | 0.00 | 0.19 | 0.835 | I | O | | | | 0.66 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 59.417 | 0.00 | 0.19 | 0.834 | I O | | | | 0.66 |
| 59.500 | 0.00 | 0.19 | 0.833 | I O | | | | 0.66 |
| 59.583 | 0.00 | 0.19 | 0.831 | I O | | | | 0.66 |
| 59.667 | 0.00 | 0.19 | 0.830 | I O | | | | 0.66 |
| 59.750 | 0.00 | 0.19 | 0.829 | I O | | | | 0.66 |
| 59.833 | 0.00 | 0.19 | 0.827 | I O | | | | 0.66 |
| 59.917 | 0.00 | 0.19 | 0.826 | I O | | | | 0.66 |
| 60.000 | 0.00 | 0.19 | 0.825 | I O | | | | 0.65 |
| 60.083 | 0.00 | 0.19 | 0.823 | I O | | | | 0.65 |
| 60.167 | 0.00 | 0.19 | 0.822 | I O | | | | 0.65 |
| 60.250 | 0.00 | 0.19 | 0.821 | I O | | | | 0.65 |
| 60.333 | 0.00 | 0.19 | 0.819 | I O | | | | 0.65 |
| 60.417 | 0.00 | 0.19 | 0.818 | I O | | | | 0.65 |
| 60.500 | 0.00 | 0.19 | 0.817 | I O | | | | 0.65 |
| 60.583 | 0.00 | 0.19 | 0.815 | I O | | | | 0.65 |
| 60.667 | 0.00 | 0.19 | 0.814 | I O | | | | 0.65 |
| 60.750 | 0.00 | 0.19 | 0.813 | I O | | | | 0.65 |
| 60.833 | 0.00 | 0.19 | 0.811 | I O | | | | 0.64 |
| 60.917 | 0.00 | 0.19 | 0.810 | I O | | | | 0.64 |
| 61.000 | 0.00 | 0.19 | 0.809 | I O | | | | 0.64 |
| 61.083 | 0.00 | 0.19 | 0.807 | I O | | | | 0.64 |
| 61.167 | 0.00 | 0.19 | 0.806 | I O | | | | 0.64 |
| 61.250 | 0.00 | 0.19 | 0.805 | I O | | | | 0.64 |
| 61.333 | 0.00 | 0.19 | 0.804 | I O | | | | 0.64 |
| 61.417 | 0.00 | 0.19 | 0.802 | I O | | | | 0.64 |
| 61.500 | 0.00 | 0.19 | 0.801 | I O | | | | 0.64 |
| 61.583 | 0.00 | 0.19 | 0.800 | I O | | | | 0.64 |
| 61.667 | 0.00 | 0.19 | 0.798 | I O | | | | 0.64 |
| 61.750 | 0.00 | 0.19 | 0.797 | I O | | | | 0.63 |
| 61.833 | 0.00 | 0.19 | 0.796 | I O | | | | 0.63 |
| 61.917 | 0.00 | 0.19 | 0.794 | I O | | | | 0.63 |
| 62.000 | 0.00 | 0.19 | 0.793 | I O | | | | 0.63 |
| 62.083 | 0.00 | 0.19 | 0.792 | I O | | | | 0.63 |
| 62.167 | 0.00 | 0.19 | 0.790 | I O | | | | 0.63 |
| 62.250 | 0.00 | 0.19 | 0.789 | I O | | | | 0.63 |
| 62.333 | 0.00 | 0.19 | 0.788 | I O | | | | 0.63 |
| 62.417 | 0.00 | 0.19 | 0.786 | I O | | | | 0.63 |
| 62.500 | 0.00 | 0.19 | 0.785 | I O | | | | 0.63 |
| 62.583 | 0.00 | 0.19 | 0.784 | I O | | | | 0.62 |
| 62.667 | 0.00 | 0.19 | 0.783 | I O | | | | 0.62 |
| 62.750 | 0.00 | 0.19 | 0.781 | I O | | | | 0.62 |
| 62.833 | 0.00 | 0.19 | 0.780 | I O | | | | 0.62 |
| 62.917 | 0.00 | 0.19 | 0.779 | I O | | | | 0.62 |
| 63.000 | 0.00 | 0.19 | 0.777 | I O | | | | 0.62 |
| 63.083 | 0.00 | 0.19 | 0.776 | I O | | | | 0.62 |
| 63.167 | 0.00 | 0.19 | 0.775 | I O | | | | 0.62 |
| 63.250 | 0.00 | 0.19 | 0.773 | I O | | | | 0.62 |
| 63.333 | 0.00 | 0.19 | 0.772 | I O | | | | 0.62 |
| 63.417 | 0.00 | 0.19 | 0.771 | I O | | | | 0.61 |
| 63.500 | 0.00 | 0.19 | 0.770 | I O | | | | 0.61 |
| 63.583 | 0.00 | 0.19 | 0.768 | I O | | | | 0.61 |
| 63.667 | 0.00 | 0.19 | 0.767 | IO | | | | 0.61 |
| 63.750 | 0.00 | 0.19 | 0.766 | IO | | | | 0.61 |
| 63.833 | 0.00 | 0.19 | 0.764 | IO | | | | 0.61 |
| 63.917 | 0.00 | 0.19 | 0.763 | IO | | | | 0.61 |
| 64.000 | 0.00 | 0.19 | 0.762 | IO | | | | 0.61 |
| 64.083 | 0.00 | 0.19 | 0.761 | IO | | | | 0.61 |
| 64.167 | 0.00 | 0.19 | 0.759 | IO | | | | 0.61 |
| 64.250 | 0.00 | 0.19 | 0.758 | IO | | | | 0.61 |
| 64.333 | 0.00 | 0.19 | 0.757 | IO | | | | 0.60 |
| 64.417 | 0.00 | 0.19 | 0.755 | IO | | | | 0.60 |
| 64.500 | 0.00 | 0.19 | 0.754 | IO | | | | 0.60 |
| 64.583 | 0.00 | 0.19 | 0.753 | IO | | | | 0.60 |
| 64.667 | 0.00 | 0.19 | 0.752 | IO | | | | 0.60 |
| 64.750 | 0.00 | 0.19 | 0.750 | IO | | | | 0.60 |
| 64.833 | 0.00 | 0.19 | 0.749 | IO | | | | 0.60 |
| 64.917 | 0.00 | 0.19 | 0.748 | IO | | | | 0.60 |
| 65.000 | 0.00 | 0.19 | 0.746 | IO | | | | 0.60 |
| 65.083 | 0.00 | 0.19 | 0.745 | IO | | | | 0.60 |
| 65.167 | 0.00 | 0.19 | 0.744 | IO | | | | 0.59 |
| 65.250 | 0.00 | 0.19 | 0.743 | IO | | | | 0.59 |

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|---|---|---|---|---|---|---|---|---|
| 65.333 | 0.00 | 0.19 | 0.741 | IO | | | | 0.59 |
| 65.417 | 0.00 | 0.18 | 0.740 | IO | | | | 0.59 |
| 65.500 | 0.00 | 0.18 | 0.739 | IO | | | | 0.59 |
| 65.583 | 0.00 | 0.18 | 0.737 | IO | | | | 0.59 |
| 65.667 | 0.00 | 0.18 | 0.736 | IO | | | | 0.59 |
| 65.750 | 0.00 | 0.18 | 0.735 | IO | | | | 0.59 |
| 65.833 | 0.00 | 0.18 | 0.734 | IO | | | | 0.59 |
| 65.917 | 0.00 | 0.18 | 0.732 | IO | | | | 0.59 |
| 66.000 | 0.00 | 0.18 | 0.731 | IO | | | | 0.59 |
| 66.083 | 0.00 | 0.18 | 0.730 | IO | | | | 0.58 |
| 66.167 | 0.00 | 0.18 | 0.729 | IO | | | | 0.58 |
| 66.250 | 0.00 | 0.18 | 0.727 | IO | | | | 0.58 |
| 66.333 | 0.00 | 0.18 | 0.726 | IO | | | | 0.58 |
| 66.417 | 0.00 | 0.18 | 0.725 | IO | | | | 0.58 |
| 66.500 | 0.00 | 0.18 | 0.724 | IO | | | | 0.58 |
| 66.583 | 0.00 | 0.18 | 0.722 | IO | | | | 0.58 |
| 66.667 | 0.00 | 0.18 | 0.721 | IO | | | | 0.58 |
| 66.750 | 0.00 | 0.18 | 0.720 | IO | | | | 0.58 |
| 66.833 | 0.00 | 0.18 | 0.719 | IO | | | | 0.58 |
| 66.917 | 0.00 | 0.18 | 0.717 | IO | | | | 0.58 |
| 67.000 | 0.00 | 0.18 | 0.716 | IO | | | | 0.57 |
| 67.083 | 0.00 | 0.18 | 0.715 | IO | | | | 0.57 |
| 67.167 | 0.00 | 0.18 | 0.713 | IO | | | | 0.57 |
| 67.250 | 0.00 | 0.18 | 0.712 | IO | | | | 0.57 |
| 67.333 | 0.00 | 0.18 | 0.711 | IO | | | | 0.57 |
| 67.417 | 0.00 | 0.18 | 0.710 | IO | | | | 0.57 |
| 67.500 | 0.00 | 0.18 | 0.708 | IO | | | | 0.57 |
| 67.583 | 0.00 | 0.18 | 0.707 | IO | | | | 0.57 |
| 67.667 | 0.00 | 0.18 | 0.706 | IO | | | | 0.57 |
| 67.750 | 0.00 | 0.18 | 0.705 | IO | | | | 0.57 |
| 67.833 | 0.00 | 0.18 | 0.703 | IO | | | | 0.56 |
| 67.917 | 0.00 | 0.18 | 0.702 | IO | | | | 0.56 |
| 68.000 | 0.00 | 0.18 | 0.701 | IO | | | | 0.56 |
| 68.083 | 0.00 | 0.18 | 0.700 | IO | | | | 0.56 |
| 68.167 | 0.00 | 0.18 | 0.698 | IO | | | | 0.56 |
| 68.250 | 0.00 | 0.18 | 0.697 | IO | | | | 0.56 |
| 68.333 | 0.00 | 0.18 | 0.696 | IO | | | | 0.56 |
| 68.417 | 0.00 | 0.18 | 0.695 | IO | | | | 0.56 |
| 68.500 | 0.00 | 0.18 | 0.694 | IO | | | | 0.56 |
| 68.583 | 0.00 | 0.18 | 0.692 | IO | | | | 0.56 |
| 68.667 | 0.00 | 0.18 | 0.691 | IO | | | | 0.56 |
| 68.750 | 0.00 | 0.18 | 0.690 | IO | | | | 0.55 |
| 68.833 | 0.00 | 0.18 | 0.689 | IO | | | | 0.55 |
| 68.917 | 0.00 | 0.18 | 0.687 | IO | | | | 0.55 |
| 69.000 | 0.00 | 0.18 | 0.686 | IO | | | | 0.55 |
| 69.083 | 0.00 | 0.18 | 0.685 | IO | | | | 0.55 |
| 69.167 | 0.00 | 0.18 | 0.684 | IO | | | | 0.55 |
| 69.250 | 0.00 | 0.18 | 0.682 | IO | | | | 0.55 |
| 69.333 | 0.00 | 0.18 | 0.681 | IO | | | | 0.55 |
| 69.417 | 0.00 | 0.18 | 0.680 | IO | | | | 0.55 |
| 69.500 | 0.00 | 0.18 | 0.679 | IO | | | | 0.55 |
| 69.583 | 0.00 | 0.18 | 0.677 | IO | | | | 0.55 |
| 69.667 | 0.00 | 0.18 | 0.676 | IO | | | | 0.54 |
| 69.750 | 0.00 | 0.18 | 0.675 | IO | | | | 0.54 |
| 69.833 | 0.00 | 0.18 | 0.674 | IO | | | | 0.54 |
| 69.917 | 0.00 | 0.18 | 0.673 | IO | | | | 0.54 |
| 70.000 | 0.00 | 0.18 | 0.671 | IO | | | | 0.54 |
| 70.083 | 0.00 | 0.18 | 0.670 | IO | | | | 0.54 |
| 70.167 | 0.00 | 0.18 | 0.669 | IO | | | | 0.54 |
| 70.250 | 0.00 | 0.18 | 0.668 | IO | | | | 0.54 |
| 70.333 | 0.00 | 0.18 | 0.666 | IO | | | | 0.54 |
| 70.417 | 0.00 | 0.18 | 0.665 | IO | | | | 0.54 |
| 70.500 | 0.00 | 0.18 | 0.664 | IO | | | | 0.54 |
| 70.583 | 0.00 | 0.18 | 0.663 | IO | | | | 0.53 |
| 70.667 | 0.00 | 0.18 | 0.662 | IO | | | | 0.53 |
| 70.750 | 0.00 | 0.18 | 0.660 | IO | | | | 0.53 |
| 70.833 | 0.00 | 0.18 | 0.659 | IO | | | | 0.53 |
| 70.917 | 0.00 | 0.18 | 0.658 | IO | | | | 0.53 |
| 71.000 | 0.00 | 0.18 | 0.657 | IO | | | | 0.53 |
| 71.083 | 0.00 | 0.18 | 0.656 | IO | | | | 0.53 |
| 71.167 | 0.00 | 0.18 | 0.654 | IO | | | | 0.53 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 71.250 | 0.00 | 0.18 | 0.653 | IO | | | | 0.53 |
| 71.333 | 0.00 | 0.18 | 0.652 | IO | | | | 0.53 |
| 71.417 | 0.00 | 0.18 | 0.651 | IO | | | | 0.53 |
| 71.500 | 0.00 | 0.18 | 0.649 | IO | | | | 0.52 |
| 71.583 | 0.00 | 0.18 | 0.648 | IO | | | | 0.52 |
| 71.667 | 0.00 | 0.18 | 0.647 | IO | | | | 0.52 |
| 71.750 | 0.00 | 0.18 | 0.646 | IO | | | | 0.52 |
| 71.833 | 0.00 | 0.17 | 0.645 | IO | | | | 0.52 |
| 71.917 | 0.00 | 0.17 | 0.643 | IO | | | | 0.52 |
| 72.000 | 0.00 | 0.17 | 0.642 | IO | | | | 0.52 |
| 72.083 | 0.00 | 0.17 | 0.641 | IO | | | | 0.52 |
| 72.167 | 0.00 | 0.17 | 0.640 | IO | | | | 0.52 |
| 72.250 | 0.00 | 0.17 | 0.639 | IO | | | | 0.52 |
| 72.333 | 0.00 | 0.17 | 0.637 | IO | | | | 0.52 |
| 72.417 | 0.00 | 0.17 | 0.636 | IO | | | | 0.51 |
| 72.500 | 0.00 | 0.17 | 0.635 | IO | | | | 0.51 |
| 72.583 | 0.00 | 0.17 | 0.634 | IO | | | | 0.51 |
| 72.667 | 0.00 | 0.17 | 0.633 | IO | | | | 0.51 |
| 72.750 | 0.00 | 0.17 | 0.631 | IO | | | | 0.51 |
| 72.833 | 0.00 | 0.17 | 0.630 | IO | | | | 0.51 |
| 72.917 | 0.00 | 0.17 | 0.629 | IO | | | | 0.51 |
| 73.000 | 0.00 | 0.17 | 0.628 | IO | | | | 0.51 |
| 73.083 | 0.00 | 0.17 | 0.627 | IO | | | | 0.51 |
| 73.167 | 0.00 | 0.17 | 0.625 | IO | | | | 0.51 |
| 73.250 | 0.00 | 0.17 | 0.624 | IO | | | | 0.51 |
| 73.333 | 0.00 | 0.17 | 0.623 | IO | | | | 0.51 |
| 73.417 | 0.00 | 0.17 | 0.622 | IO | | | | 0.50 |
| 73.500 | 0.00 | 0.17 | 0.621 | IO | | | | 0.50 |
| 73.583 | 0.00 | 0.17 | 0.620 | IO | | | | 0.50 |
| 73.667 | 0.00 | 0.17 | 0.618 | IO | | | | 0.50 |
| 73.750 | 0.00 | 0.17 | 0.617 | IO | | | | 0.50 |
| 73.833 | 0.00 | 0.17 | 0.616 | IO | | | | 0.50 |
| 73.917 | 0.00 | 0.17 | 0.615 | IO | | | | 0.50 |
| 74.000 | 0.00 | 0.17 | 0.614 | IO | | | | 0.50 |
| 74.083 | 0.00 | 0.17 | 0.612 | IO | | | | 0.50 |
| 74.167 | 0.00 | 0.17 | 0.611 | IO | | | | 0.50 |
| 74.250 | 0.00 | 0.17 | 0.610 | IO | | | | 0.50 |
| 74.333 | 0.00 | 0.17 | 0.609 | IO | | | | 0.49 |
| 74.417 | 0.00 | 0.17 | 0.608 | IO | | | | 0.49 |
| 74.500 | 0.00 | 0.17 | 0.607 | IO | | | | 0.49 |
| 74.583 | 0.00 | 0.17 | 0.605 | IO | | | | 0.49 |
| 74.667 | 0.00 | 0.17 | 0.604 | IO | | | | 0.49 |
| 74.750 | 0.00 | 0.17 | 0.603 | IO | | | | 0.49 |
| 74.833 | 0.00 | 0.17 | 0.602 | IO | | | | 0.49 |
| 74.917 | 0.00 | 0.17 | 0.601 | IO | | | | 0.49 |
| 75.000 | 0.00 | 0.17 | 0.600 | IO | | | | 0.49 |
| 75.083 | 0.00 | 0.17 | 0.598 | IO | | | | 0.49 |
| 75.167 | 0.00 | 0.17 | 0.597 | IO | | | | 0.48 |
| 75.250 | 0.00 | 0.17 | 0.596 | IO | | | | 0.48 |
| 75.333 | 0.00 | 0.17 | 0.595 | IO | | | | 0.48 |
| 75.417 | 0.00 | 0.17 | 0.594 | IO | | | | 0.48 |
| 75.500 | 0.00 | 0.17 | 0.593 | IO | | | | 0.48 |
| 75.583 | 0.00 | 0.17 | 0.592 | IO | | | | 0.48 |
| 75.667 | 0.00 | 0.16 | 0.590 | IO | | | | 0.48 |
| 75.750 | 0.00 | 0.16 | 0.589 | IO | | | | 0.48 |
| 75.833 | 0.00 | 0.16 | 0.588 | IO | | | | 0.48 |
| 75.917 | 0.00 | 0.16 | 0.587 | IO | | | | 0.48 |
| 76.000 | 0.00 | 0.16 | 0.586 | IO | | | | 0.48 |
| 76.083 | 0.00 | 0.16 | 0.585 | IO | | | | 0.47 |
| 76.167 | 0.00 | 0.16 | 0.584 | IO | | | | 0.47 |
| 76.250 | 0.00 | 0.16 | 0.583 | IO | | | | 0.47 |
| 76.333 | 0.00 | 0.16 | 0.581 | IO | | | | 0.47 |
| 76.417 | 0.00 | 0.16 | 0.580 | IO | | | | 0.47 |
| 76.500 | 0.00 | 0.16 | 0.579 | IO | | | | 0.47 |
| 76.583 | 0.00 | 0.16 | 0.578 | IO | | | | 0.47 |
| 76.667 | 0.00 | 0.16 | 0.577 | IO | | | | 0.47 |
| 76.750 | 0.00 | 0.16 | 0.576 | IO | | | | 0.47 |
| 76.833 | 0.00 | 0.16 | 0.575 | IO | | | | 0.47 |
| 76.917 | 0.00 | 0.16 | 0.574 | IO | | | | 0.47 |
| 77.000 | 0.00 | 0.16 | 0.573 | IO | | | | 0.46 |
| 77.083 | 0.00 | 0.16 | 0.571 | IO | | | | 0.46 |

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|---|---|---|---|---|---|---|---|---|
| 77.167 | 0.00 | 0.16 | 0.570 | IO | | | | 0.46 |
| 77.250 | 0.00 | 0.16 | 0.569 | IO | | | | 0.46 |
| 77.333 | 0.00 | 0.16 | 0.568 | IO | | | | 0.46 |
| 77.417 | 0.00 | 0.16 | 0.567 | IO | | | | 0.46 |
| 77.500 | 0.00 | 0.16 | 0.566 | IO | | | | 0.46 |
| 77.583 | 0.00 | 0.16 | 0.565 | IO | | | | 0.46 |
| 77.667 | 0.00 | 0.16 | 0.564 | IO | | | | 0.46 |
| 77.750 | 0.00 | 0.16 | 0.563 | IO | | | | 0.46 |
| 77.833 | 0.00 | 0.16 | 0.562 | IO | | | | 0.46 |
| 77.917 | 0.00 | 0.16 | 0.561 | IO | | | | 0.46 |
| 78.000 | 0.00 | 0.16 | 0.559 | IO | | | | 0.45 |
| 78.083 | 0.00 | 0.16 | 0.558 | IO | | | | 0.45 |
| 78.167 | 0.00 | 0.16 | 0.557 | IO | | | | 0.45 |
| 78.250 | 0.00 | 0.16 | 0.556 | IO | | | | 0.45 |
| 78.333 | 0.00 | 0.16 | 0.555 | IO | | | | 0.45 |
| 78.417 | 0.00 | 0.15 | 0.554 | IO | | | | 0.45 |
| 78.500 | 0.00 | 0.15 | 0.553 | IO | | | | 0.45 |
| 78.583 | 0.00 | 0.15 | 0.552 | IO | | | | 0.45 |
| 78.667 | 0.00 | 0.15 | 0.551 | IO | | | | 0.45 |
| 78.750 | 0.00 | 0.15 | 0.550 | IO | | | | 0.45 |
| 78.833 | 0.00 | 0.15 | 0.549 | IO | | | | 0.45 |
| 78.917 | 0.00 | 0.15 | 0.548 | IO | | | | 0.44 |
| 79.000 | 0.00 | 0.15 | 0.547 | IO | | | | 0.44 |
| 79.083 | 0.00 | 0.15 | 0.546 | IO | | | | 0.44 |
| 79.167 | 0.00 | 0.15 | 0.545 | IO | | | | 0.44 |
| 79.250 | 0.00 | 0.15 | 0.544 | IO | | | | 0.44 |
| 79.333 | 0.00 | 0.15 | 0.543 | IO | | | | 0.44 |
| 79.417 | 0.00 | 0.15 | 0.541 | IO | | | | 0.44 |
| 79.500 | 0.00 | 0.15 | 0.540 | IO | | | | 0.44 |
| 79.583 | 0.00 | 0.15 | 0.539 | IO | | | | 0.44 |
| 79.667 | 0.00 | 0.15 | 0.538 | IO | | | | 0.44 |
| 79.750 | 0.00 | 0.15 | 0.537 | IO | | | | 0.44 |
| 79.833 | 0.00 | 0.15 | 0.536 | IO | | | | 0.44 |
| 79.917 | 0.00 | 0.15 | 0.535 | IO | | | | 0.43 |
| 80.000 | 0.00 | 0.15 | 0.534 | IO | | | | 0.43 |
| 80.083 | 0.00 | 0.15 | 0.533 | IO | | | | 0.43 |
| 80.167 | 0.00 | 0.15 | 0.532 | IO | | | | 0.43 |
| 80.250 | 0.00 | 0.15 | 0.531 | IO | | | | 0.43 |
| 80.333 | 0.00 | 0.15 | 0.530 | IO | | | | 0.43 |
| 80.417 | 0.00 | 0.15 | 0.529 | IO | | | | 0.43 |
| 80.500 | 0.00 | 0.15 | 0.528 | IO | | | | 0.43 |
| 80.583 | 0.00 | 0.15 | 0.527 | IO | | | | 0.43 |
| 80.667 | 0.00 | 0.15 | 0.526 | IO | | | | 0.43 |
| 80.750 | 0.00 | 0.15 | 0.525 | IO | | | | 0.43 |
| 80.833 | 0.00 | 0.15 | 0.524 | IO | | | | 0.43 |
| 80.917 | 0.00 | 0.15 | 0.523 | IO | | | | 0.42 |
| 81.000 | 0.00 | 0.15 | 0.522 | IO | | | | 0.42 |
| 81.083 | 0.00 | 0.15 | 0.521 | IO | | | | 0.42 |
| 81.167 | 0.00 | 0.15 | 0.520 | IO | | | | 0.42 |
| 81.250 | 0.00 | 0.14 | 0.519 | IO | | | | 0.42 |
| 81.333 | 0.00 | 0.14 | 0.518 | IO | | | | 0.42 |
| 81.417 | 0.00 | 0.14 | 0.517 | IO | | | | 0.42 |
| 81.500 | 0.00 | 0.14 | 0.516 | IO | | | | 0.42 |
| 81.583 | 0.00 | 0.14 | 0.515 | IO | | | | 0.42 |
| 81.667 | 0.00 | 0.14 | 0.514 | IO | | | | 0.42 |
| 81.750 | 0.00 | 0.14 | 0.513 | IO | | | | 0.42 |
| 81.833 | 0.00 | 0.14 | 0.512 | IO | | | | 0.42 |
| 81.917 | 0.00 | 0.14 | 0.511 | IO | | | | 0.41 |
| 82.000 | 0.00 | 0.14 | 0.510 | IO | | | | 0.41 |
| 82.083 | 0.00 | 0.14 | 0.509 | IO | | | | 0.41 |
| 82.167 | 0.00 | 0.14 | 0.508 | IO | | | | 0.41 |
| 82.250 | 0.00 | 0.14 | 0.507 | IO | | | | 0.41 |
| 82.333 | 0.00 | 0.14 | 0.506 | IO | | | | 0.41 |
| 82.417 | 0.00 | 0.14 | 0.505 | IO | | | | 0.41 |
| 82.500 | 0.00 | 0.14 | 0.504 | IO | | | | 0.41 |
| 82.583 | 0.00 | 0.14 | 0.503 | IO | | | | 0.41 |
| 82.667 | 0.00 | 0.14 | 0.502 | IO | | | | 0.41 |
| 82.750 | 0.00 | 0.14 | 0.501 | IO | | | | 0.41 |
| 82.833 | 0.00 | 0.14 | 0.500 | IO | | | | 0.41 |
| 82.917 | 0.00 | 0.14 | 0.499 | IO | | | | 0.41 |
| 83.000 | 0.00 | 0.14 | 0.499 | IO | | | | 0.40 |

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|---|---|---|---|---|---|---|---|---|
| 83.083 | 0.00 | 0.14 | 0.498 | IO | | | | 0.40 |
| 83.167 | 0.00 | 0.14 | 0.497 | IO | | | | 0.40 |
| 83.250 | 0.00 | 0.14 | 0.496 | IO | | | | 0.40 |
| 83.333 | 0.00 | 0.14 | 0.495 | IO | | | | 0.40 |
| 83.417 | 0.00 | 0.14 | 0.494 | IO | | | | 0.40 |
| 83.500 | 0.00 | 0.14 | 0.493 | IO | | | | 0.40 |
| 83.583 | 0.00 | 0.14 | 0.492 | IO | | | | 0.40 |
| 83.667 | 0.00 | 0.14 | 0.491 | IO | | | | 0.40 |
| 83.750 | 0.00 | 0.14 | 0.490 | IO | | | | 0.40 |
| 83.833 | 0.00 | 0.14 | 0.489 | IO | | | | 0.40 |
| 83.917 | 0.00 | 0.14 | 0.488 | IO | | | | 0.40 |
| 84.000 | 0.00 | 0.14 | 0.487 | IO | | | | 0.40 |
| 84.083 | 0.00 | 0.14 | 0.486 | IO | | | | 0.39 |
| 84.167 | 0.00 | 0.14 | 0.485 | IO | | | | 0.39 |
| 84.250 | 0.00 | 0.14 | 0.484 | IO | | | | 0.39 |
| 84.333 | 0.00 | 0.13 | 0.483 | IO | | | | 0.39 |
| 84.417 | 0.00 | 0.13 | 0.482 | IO | | | | 0.39 |
| 84.500 | 0.00 | 0.13 | 0.482 | IO | | | | 0.39 |
| 84.583 | 0.00 | 0.13 | 0.481 | IO | | | | 0.39 |
| 84.667 | 0.00 | 0.13 | 0.480 | IO | | | | 0.39 |
| 84.750 | 0.00 | 0.13 | 0.479 | IO | | | | 0.39 |
| 84.833 | 0.00 | 0.13 | 0.478 | IO | | | | 0.39 |
| 84.917 | 0.00 | 0.13 | 0.477 | IO | | | | 0.39 |
| 85.000 | 0.00 | 0.13 | 0.476 | IO | | | | 0.39 |
| 85.083 | 0.00 | 0.13 | 0.475 | IO | | | | 0.39 |
| 85.167 | 0.00 | 0.13 | 0.474 | IO | | | | 0.38 |
| 85.250 | 0.00 | 0.13 | 0.473 | IO | | | | 0.38 |
| 85.333 | 0.00 | 0.13 | 0.472 | IO | | | | 0.38 |
| 85.417 | 0.00 | 0.13 | 0.471 | IO | | | | 0.38 |
| 85.500 | 0.00 | 0.13 | 0.471 | IO | | | | 0.38 |
| 85.583 | 0.00 | 0.13 | 0.470 | IO | | | | 0.38 |
| 85.667 | 0.00 | 0.13 | 0.469 | IO | | | | 0.38 |
| 85.750 | 0.00 | 0.13 | 0.468 | IO | | | | 0.38 |
| 85.833 | 0.00 | 0.13 | 0.467 | IO | | | | 0.38 |
| 85.917 | 0.00 | 0.13 | 0.466 | IO | | | | 0.38 |
| 86.000 | 0.00 | 0.13 | 0.465 | IO | | | | 0.38 |
| 86.083 | 0.00 | 0.13 | 0.464 | IO | | | | 0.38 |
| 86.167 | 0.00 | 0.13 | 0.463 | IO | | | | 0.38 |
| 86.250 | 0.00 | 0.13 | 0.463 | IO | | | | 0.38 |
| 86.333 | 0.00 | 0.13 | 0.462 | IO | | | | 0.37 |
| 86.417 | 0.00 | 0.13 | 0.461 | IO | | | | 0.37 |
| 86.500 | 0.00 | 0.13 | 0.460 | IO | | | | 0.37 |
| 86.583 | 0.00 | 0.13 | 0.459 | IO | | | | 0.37 |
| 86.667 | 0.00 | 0.13 | 0.458 | IO | | | | 0.37 |
| 86.750 | 0.00 | 0.13 | 0.457 | IO | | | | 0.37 |
| 86.833 | 0.00 | 0.13 | 0.456 | IO | | | | 0.37 |
| 86.917 | 0.00 | 0.13 | 0.455 | IO | | | | 0.37 |
| 87.000 | 0.00 | 0.13 | 0.455 | IO | | | | 0.37 |
| 87.083 | 0.00 | 0.13 | 0.454 | IO | | | | 0.37 |
| 87.167 | 0.00 | 0.13 | 0.453 | IO | | | | 0.37 |
| 87.250 | 0.00 | 0.13 | 0.452 | IO | | | | 0.37 |
| 87.333 | 0.00 | 0.13 | 0.451 | IO | | | | 0.37 |
| 87.417 | 0.00 | 0.13 | 0.450 | IO | | | | 0.37 |
| 87.500 | 0.00 | 0.13 | 0.449 | IO | | | | 0.36 |
| 87.583 | 0.00 | 0.13 | 0.448 | IO | | | | 0.36 |
| 87.667 | 0.00 | 0.12 | 0.448 | IO | | | | 0.36 |
| 87.750 | 0.00 | 0.12 | 0.447 | IO | | | | 0.36 |
| 87.833 | 0.00 | 0.12 | 0.446 | IO | | | | 0.36 |
| 87.917 | 0.00 | 0.12 | 0.445 | IO | | | | 0.36 |
| 88.000 | 0.00 | 0.12 | 0.444 | IO | | | | 0.36 |
| 88.083 | 0.00 | 0.12 | 0.443 | IO | | | | 0.36 |
| 88.167 | 0.00 | 0.12 | 0.442 | IO | | | | 0.36 |
| 88.250 | 0.00 | 0.12 | 0.442 | IO | | | | 0.36 |
| 88.333 | 0.00 | 0.12 | 0.441 | IO | | | | 0.36 |
| 88.417 | 0.00 | 0.12 | 0.440 | IO | | | | 0.36 |
| 88.500 | 0.00 | 0.12 | 0.439 | IO | | | | 0.36 |
| 88.583 | 0.00 | 0.12 | 0.438 | IO | | | | 0.36 |
| 88.667 | 0.00 | 0.12 | 0.437 | IO | | | | 0.36 |
| 88.750 | 0.00 | 0.12 | 0.437 | IO | | | | 0.35 |
| 88.833 | 0.00 | 0.12 | 0.436 | IO | | | | 0.35 |
| 88.917 | 0.00 | 0.12 | 0.435 | IO | | | | 0.35 |

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|---|---|---|---|---|---|---|---|---|
| 89.000 | 0.00 | 0.12 | 0.434 | IO | | | | 0.35 |
| 89.083 | 0.00 | 0.12 | 0.433 | IO | | | | 0.35 |
| 89.167 | 0.00 | 0.12 | 0.432 | IO | | | | 0.35 |
| 89.250 | 0.00 | 0.12 | 0.432 | IO | | | | 0.35 |
| 89.333 | 0.00 | 0.12 | 0.431 | IO | | | | 0.35 |
| 89.417 | 0.00 | 0.12 | 0.430 | IO | | | | 0.35 |
| 89.500 | 0.00 | 0.12 | 0.429 | IO | | | | 0.35 |
| 89.583 | 0.00 | 0.12 | 0.428 | IO | | | | 0.35 |
| 89.667 | 0.00 | 0.12 | 0.427 | IO | | | | 0.35 |
| 89.750 | 0.00 | 0.12 | 0.427 | IO | | | | 0.35 |
| 89.833 | 0.00 | 0.12 | 0.426 | IO | | | | 0.35 |
| 89.917 | 0.00 | 0.12 | 0.425 | IO | | | | 0.34 |
| 90.000 | 0.00 | 0.12 | 0.424 | IO | | | | 0.34 |
| 90.083 | 0.00 | 0.12 | 0.423 | IO | | | | 0.34 |
| 90.167 | 0.00 | 0.12 | 0.423 | IO | | | | 0.34 |
| 90.250 | 0.00 | 0.12 | 0.422 | IO | | | | 0.34 |
| 90.333 | 0.00 | 0.12 | 0.421 | IO | | | | 0.34 |
| 90.417 | 0.00 | 0.12 | 0.420 | IO | | | | 0.34 |
| 90.500 | 0.00 | 0.12 | 0.419 | IO | | | | 0.34 |
| 90.583 | 0.00 | 0.12 | 0.418 | IO | | | | 0.34 |
| 90.667 | 0.00 | 0.12 | 0.418 | IO | | | | 0.34 |
| 90.750 | 0.00 | 0.12 | 0.417 | IO | | | | 0.34 |
| 90.833 | 0.00 | 0.12 | 0.416 | IO | | | | 0.34 |
| 90.917 | 0.00 | 0.12 | 0.415 | IO | | | | 0.34 |
| 91.000 | 0.00 | 0.12 | 0.414 | IO | | | | 0.34 |
| 91.083 | 0.00 | 0.12 | 0.414 | IO | | | | 0.34 |
| 91.167 | 0.00 | 0.12 | 0.413 | IO | | | | 0.34 |
| 91.250 | 0.00 | 0.12 | 0.412 | IO | | | | 0.33 |
| 91.333 | 0.00 | 0.11 | 0.411 | IO | | | | 0.33 |
| 91.417 | 0.00 | 0.11 | 0.411 | IO | | | | 0.33 |
| 91.500 | 0.00 | 0.11 | 0.410 | IO | | | | 0.33 |
| 91.583 | 0.00 | 0.11 | 0.409 | IO | | | | 0.33 |
| 91.667 | 0.00 | 0.11 | 0.408 | IO | | | | 0.33 |
| 91.750 | 0.00 | 0.11 | 0.407 | IO | | | | 0.33 |
| 91.833 | 0.00 | 0.11 | 0.407 | IO | | | | 0.33 |
| 91.917 | 0.00 | 0.11 | 0.406 | IO | | | | 0.33 |
| 92.000 | 0.00 | 0.11 | 0.405 | IO | | | | 0.33 |
| 92.083 | 0.00 | 0.11 | 0.404 | IO | | | | 0.33 |
| 92.167 | 0.00 | 0.11 | 0.403 | IO | | | | 0.33 |
| 92.250 | 0.00 | 0.11 | 0.403 | IO | | | | 0.33 |
| 92.333 | 0.00 | 0.11 | 0.402 | IO | | | | 0.33 |
| 92.417 | 0.00 | 0.11 | 0.401 | IO | | | | 0.33 |
| 92.500 | 0.00 | 0.11 | 0.400 | IO | | | | 0.32 |
| 92.583 | 0.00 | 0.11 | 0.400 | IO | | | | 0.32 |
| 92.667 | 0.00 | 0.11 | 0.399 | IO | | | | 0.32 |
| 92.750 | 0.00 | 0.11 | 0.398 | IO | | | | 0.32 |
| 92.833 | 0.00 | 0.11 | 0.397 | IO | | | | 0.32 |
| 92.917 | 0.00 | 0.11 | 0.397 | IO | | | | 0.32 |
| 93.000 | 0.00 | 0.11 | 0.396 | IO | | | | 0.32 |
| 93.083 | 0.00 | 0.11 | 0.395 | IO | | | | 0.32 |
| 93.167 | 0.00 | 0.11 | 0.394 | IO | | | | 0.32 |
| 93.250 | 0.00 | 0.11 | 0.394 | IO | | | | 0.32 |
| 93.333 | 0.00 | 0.11 | 0.393 | IO | | | | 0.32 |
| 93.417 | 0.00 | 0.11 | 0.392 | IO | | | | 0.32 |
| 93.500 | 0.00 | 0.11 | 0.391 | IO | | | | 0.32 |
| 93.583 | 0.00 | 0.11 | 0.390 | IO | | | | 0.32 |
| 93.667 | 0.00 | 0.11 | 0.390 | IO | | | | 0.32 |
| 93.750 | 0.00 | 0.11 | 0.389 | IO | | | | 0.32 |
| 93.833 | 0.00 | 0.11 | 0.388 | IO | | | | 0.32 |
| 93.917 | 0.00 | 0.11 | 0.388 | IO | | | | 0.31 |
| 94.000 | 0.00 | 0.11 | 0.387 | IO | | | | 0.31 |
| 94.083 | 0.00 | 0.11 | 0.386 | IO | | | | 0.31 |
| 94.167 | 0.00 | 0.11 | 0.385 | IO | | | | 0.31 |
| 94.250 | 0.00 | 0.11 | 0.385 | IO | | | | 0.31 |
| 94.333 | 0.00 | 0.11 | 0.384 | IO | | | | 0.31 |
| 94.417 | 0.00 | 0.11 | 0.383 | IO | | | | 0.31 |
| 94.500 | 0.00 | 0.11 | 0.382 | IO | | | | 0.31 |
| 94.583 | 0.00 | 0.11 | 0.382 | IO | | | | 0.31 |
| 94.667 | 0.00 | 0.11 | 0.381 | IO | | | | 0.31 |
| 94.750 | 0.00 | 0.11 | 0.380 | IO | | | | 0.31 |
| 94.833 | 0.00 | 0.11 | 0.379 | IO | | | | 0.31 |

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|---|---|---|---|---|---|---|---|---|
| 94.917 | 0.00 | 0.11 | 0.379 | IO | | | | 0.31 |
| 95.000 | 0.00 | 0.11 | 0.378 | IO | | | | 0.31 |
| 95.083 | 0.00 | 0.11 | 0.377 | IO | | | | 0.31 |
| 95.167 | 0.00 | 0.11 | 0.376 | IO | | | | 0.31 |
| 95.250 | 0.00 | 0.10 | 0.376 | IO | | | | 0.31 |
| 95.333 | 0.00 | 0.10 | 0.375 | IO | | | | 0.30 |
| 95.417 | 0.00 | 0.10 | 0.374 | IO | | | | 0.30 |
| 95.500 | 0.00 | 0.10 | 0.374 | IO | | | | 0.30 |
| 95.583 | 0.00 | 0.10 | 0.373 | IO | | | | 0.30 |
| 95.667 | 0.00 | 0.10 | 0.372 | IO | | | | 0.30 |
| 95.750 | 0.00 | 0.10 | 0.371 | IO | | | | 0.30 |
| 95.833 | 0.00 | 0.10 | 0.371 | IO | | | | 0.30 |
| 95.917 | 0.00 | 0.10 | 0.370 | IO | | | | 0.30 |
| 96.000 | 0.00 | 0.10 | 0.369 | IO | | | | 0.30 |
| 96.083 | 0.00 | 0.10 | 0.369 | IO | | | | 0.30 |
| 96.167 | 0.00 | 0.10 | 0.368 | IO | | | | 0.30 |
| 96.250 | 0.00 | 0.10 | 0.367 | IO | | | | 0.30 |
| 96.333 | 0.00 | 0.10 | 0.366 | IO | | | | 0.30 |
| 96.417 | 0.00 | 0.10 | 0.366 | IO | | | | 0.30 |
| 96.500 | 0.00 | 0.10 | 0.365 | IO | | | | 0.30 |
| 96.583 | 0.00 | 0.10 | 0.364 | IO | | | | 0.30 |
| 96.667 | 0.00 | 0.10 | 0.364 | IO | | | | 0.30 |
| 96.750 | 0.00 | 0.10 | 0.363 | IO | | | | 0.29 |
| 96.833 | 0.00 | 0.10 | 0.362 | IO | | | | 0.29 |
| 96.917 | 0.00 | 0.10 | 0.362 | IO | | | | 0.29 |
| 97.000 | 0.00 | 0.10 | 0.361 | IO | | | | 0.29 |
| 97.083 | 0.00 | 0.10 | 0.360 | IO | | | | 0.29 |
| 97.167 | 0.00 | 0.10 | 0.360 | IO | | | | 0.29 |
| 97.250 | 0.00 | 0.10 | 0.359 | IO | | | | 0.29 |
| 97.333 | 0.00 | 0.10 | 0.358 | IO | | | | 0.29 |
| 97.417 | 0.00 | 0.10 | 0.357 | IO | | | | 0.29 |
| 97.500 | 0.00 | 0.10 | 0.357 | IO | | | | 0.29 |
| 97.583 | 0.00 | 0.10 | 0.356 | IO | | | | 0.29 |
| 97.667 | 0.00 | 0.10 | 0.355 | IO | | | | 0.29 |
| 97.750 | 0.00 | 0.10 | 0.355 | IO | | | | 0.29 |
| 97.833 | 0.00 | 0.10 | 0.354 | IO | | | | 0.29 |
| 97.917 | 0.00 | 0.10 | 0.353 | IO | | | | 0.29 |
| 98.000 | 0.00 | 0.10 | 0.353 | IO | | | | 0.29 |
| 98.083 | 0.00 | 0.10 | 0.352 | IO | | | | 0.29 |
| 98.167 | 0.00 | 0.10 | 0.351 | IO | | | | 0.29 |
| 98.250 | 0.00 | 0.10 | 0.351 | IO | | | | 0.28 |
| 98.333 | 0.00 | 0.10 | 0.350 | IO | | | | 0.28 |
| 98.417 | 0.00 | 0.10 | 0.349 | IO | | | | 0.28 |
| 98.500 | 0.00 | 0.10 | 0.349 | IO | | | | 0.28 |
| 98.583 | 0.00 | 0.10 | 0.348 | IO | | | | 0.28 |
| 98.667 | 0.00 | 0.10 | 0.347 | IO | | | | 0.28 |
| 98.750 | 0.00 | 0.10 | 0.347 | IO | | | | 0.28 |
| 98.833 | 0.00 | 0.10 | 0.346 | IO | | | | 0.28 |
| 98.917 | 0.00 | 0.10 | 0.345 | IO | | | | 0.28 |
| 99.000 | 0.00 | 0.10 | 0.345 | IO | | | | 0.28 |
| 99.083 | 0.00 | 0.10 | 0.344 | IO | | | | 0.28 |
| 99.167 | 0.00 | 0.10 | 0.343 | IO | | | | 0.28 |
| 99.250 | 0.00 | 0.10 | 0.343 | IO | | | | 0.28 |
| 99.333 | 0.00 | 0.10 | 0.342 | IO | | | | 0.28 |
| 99.417 | 0.00 | 0.10 | 0.341 | IO | | | | 0.28 |
| 99.500 | 0.00 | 0.10 | 0.341 | IO | | | | 0.28 |
| 99.583 | 0.00 | 0.09 | 0.340 | IO | | | | 0.28 |
| 99.667 | 0.00 | 0.09 | 0.339 | IO | | | | 0.28 |
| 99.750 | 0.00 | 0.09 | 0.339 | IO | | | | 0.27 |
| 99.833 | 0.00 | 0.09 | 0.338 | IO | | | | 0.27 |
| 99.917 | 0.00 | 0.09 | 0.337 | IO | | | | 0.27 |
| 100.000 | 0.00 | 0.09 | 0.337 | IO | | | | 0.27 |
| 100.083 | 0.00 | 0.09 | 0.336 | IO | | | | 0.27 |
| 100.167 | 0.00 | 0.09 | 0.335 | O | | | | 0.27 |
| 100.250 | 0.00 | 0.09 | 0.335 | O | | | | 0.27 |
| 100.333 | 0.00 | 0.09 | 0.334 | O | | | | 0.27 |
| 100.417 | 0.00 | 0.09 | 0.334 | O | | | | 0.27 |
| 100.500 | 0.00 | 0.09 | 0.333 | O | | | | 0.27 |
| 100.583 | 0.00 | 0.09 | 0.332 | O | | | | 0.27 |
| 100.667 | 0.00 | 0.09 | 0.332 | O | | | | 0.27 |
| 100.750 | 0.00 | 0.09 | 0.331 | O | | | | 0.27 |

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|---|---|---|---|---|---|---|---|---|---|
| 100.833 | 0.00 | 0.09 | 0.330 | O | | | | | 0.27 |
| 100.917 | 0.00 | 0.09 | 0.330 | O | | | | | 0.27 |
| 101.000 | 0.00 | 0.09 | 0.329 | O | | | | | 0.27 |
| 101.083 | 0.00 | 0.09 | 0.328 | O | | | | | 0.27 |
| 101.167 | 0.00 | 0.09 | 0.328 | O | | | | | 0.27 |
| 101.250 | 0.00 | 0.09 | 0.327 | O | | | | | 0.27 |
| 101.333 | 0.00 | 0.09 | 0.327 | O | | | | | 0.27 |
| 101.417 | 0.00 | 0.09 | 0.326 | O | | | | | 0.26 |
| 101.500 | 0.00 | 0.09 | 0.325 | O | | | | | 0.26 |
| 101.583 | 0.00 | 0.09 | 0.325 | O | | | | | 0.26 |
| 101.667 | 0.00 | 0.09 | 0.324 | O | | | | | 0.26 |
| 101.750 | 0.00 | 0.09 | 0.323 | O | | | | | 0.26 |
| 101.833 | 0.00 | 0.09 | 0.323 | O | | | | | 0.26 |
| 101.917 | 0.00 | 0.09 | 0.322 | O | | | | | 0.26 |
| 102.000 | 0.00 | 0.09 | 0.322 | O | | | | | 0.26 |
| 102.083 | 0.00 | 0.09 | 0.321 | O | | | | | 0.26 |
| 102.167 | 0.00 | 0.09 | 0.320 | O | | | | | 0.26 |
| 102.250 | 0.00 | 0.09 | 0.320 | O | | | | | 0.26 |
| 102.333 | 0.00 | 0.09 | 0.319 | O | | | | | 0.26 |
| 102.417 | 0.00 | 0.09 | 0.318 | O | | | | | 0.26 |
| 102.500 | 0.00 | 0.09 | 0.318 | O | | | | | 0.26 |
| 102.583 | 0.00 | 0.09 | 0.317 | O | | | | | 0.26 |
| 102.667 | 0.00 | 0.09 | 0.317 | O | | | | | 0.26 |
| 102.750 | 0.00 | 0.09 | 0.316 | O | | | | | 0.26 |
| 102.833 | 0.00 | 0.09 | 0.315 | O | | | | | 0.26 |
| 102.917 | 0.00 | 0.09 | 0.315 | O | | | | | 0.26 |
| 103.000 | 0.00 | 0.09 | 0.314 | O | | | | | 0.26 |
| 103.083 | 0.00 | 0.09 | 0.314 | O | | | | | 0.25 |
| 103.167 | 0.00 | 0.09 | 0.313 | O | | | | | 0.25 |
| 103.250 | 0.00 | 0.09 | 0.312 | O | | | | | 0.25 |
| 103.333 | 0.00 | 0.09 | 0.312 | O | | | | | 0.25 |
| 103.417 | 0.00 | 0.09 | 0.311 | O | | | | | 0.25 |
| 103.500 | 0.00 | 0.09 | 0.311 | O | | | | | 0.25 |
| 103.583 | 0.00 | 0.09 | 0.310 | O | | | | | 0.25 |
| 103.667 | 0.00 | 0.09 | 0.309 | O | | | | | 0.25 |
| 103.750 | 0.00 | 0.09 | 0.309 | O | | | | | 0.25 |
| 103.833 | 0.00 | 0.09 | 0.308 | O | | | | | 0.25 |
| 103.917 | 0.00 | 0.09 | 0.308 | O | | | | | 0.25 |
| 104.000 | 0.00 | 0.09 | 0.307 | O | | | | | 0.25 |
| 104.083 | 0.00 | 0.09 | 0.306 | O | | | | | 0.25 |
| 104.167 | 0.00 | 0.09 | 0.306 | O | | | | | 0.25 |
| 104.250 | 0.00 | 0.09 | 0.305 | O | | | | | 0.25 |
| 104.333 | 0.00 | 0.09 | 0.305 | O | | | | | 0.25 |
| 104.417 | 0.00 | 0.08 | 0.304 | O | | | | | 0.25 |
| 104.500 | 0.00 | 0.08 | 0.304 | O | | | | | 0.25 |
| 104.583 | 0.00 | 0.08 | 0.303 | O | | | | | 0.25 |
| 104.667 | 0.00 | 0.08 | 0.302 | O | | | | | 0.25 |
| 104.750 | 0.00 | 0.08 | 0.302 | O | | | | | 0.24 |
| 104.833 | 0.00 | 0.08 | 0.301 | O | | | | | 0.24 |
| 104.917 | 0.00 | 0.08 | 0.301 | O | | | | | 0.24 |
| 105.000 | 0.00 | 0.08 | 0.300 | O | | | | | 0.24 |
| 105.083 | 0.00 | 0.08 | 0.299 | O | | | | | 0.24 |
| 105.167 | 0.00 | 0.08 | 0.299 | O | | | | | 0.24 |
| 105.250 | 0.00 | 0.08 | 0.298 | O | | | | | 0.24 |
| 105.333 | 0.00 | 0.08 | 0.298 | O | | | | | 0.24 |
| 105.417 | 0.00 | 0.08 | 0.297 | O | | | | | 0.24 |
| 105.500 | 0.00 | 0.08 | 0.297 | O | | | | | 0.24 |
| 105.583 | 0.00 | 0.08 | 0.296 | O | | | | | 0.24 |
| 105.667 | 0.00 | 0.08 | 0.295 | O | | | | | 0.24 |
| 105.750 | 0.00 | 0.08 | 0.295 | O | | | | | 0.24 |
| 105.833 | 0.00 | 0.08 | 0.294 | O | | | | | 0.24 |
| 105.917 | 0.00 | 0.08 | 0.294 | O | | | | | 0.24 |
| 106.000 | 0.00 | 0.08 | 0.293 | O | | | | | 0.24 |
| 106.083 | 0.00 | 0.08 | 0.293 | O | | | | | 0.24 |
| 106.167 | 0.00 | 0.08 | 0.292 | O | | | | | 0.24 |
| 106.250 | 0.00 | 0.08 | 0.292 | O | | | | | 0.24 |
| 106.333 | 0.00 | 0.08 | 0.291 | O | | | | | 0.24 |
| 106.417 | 0.00 | 0.08 | 0.290 | O | | | | | 0.24 |
| 106.500 | 0.00 | 0.08 | 0.290 | O | | | | | 0.24 |
| 106.583 | 0.00 | 0.08 | 0.289 | O | | | | | 0.23 |
| 106.667 | 0.00 | 0.08 | 0.289 | O | | | | | 0.23 |

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|---|---|---|---|---|---|---|---|---|---|
| 106.750 | 0.00 | 0.08 | 0.288 | O | \| | \| | \| | \| | 0.23 |
| 106.833 | 0.00 | 0.08 | 0.288 | O | \| | \| | \| | \| | 0.23 |
| 106.917 | 0.00 | 0.08 | 0.287 | O | \| | \| | \| | \| | 0.23 |
| 107.000 | 0.00 | 0.08 | 0.287 | O | \| | \| | \| | \| | 0.23 |
| 107.083 | 0.00 | 0.08 | 0.286 | O | \| | \| | \| | \| | 0.23 |
| 107.167 | 0.00 | 0.08 | 0.285 | O | \| | \| | \| | \| | 0.23 |
| 107.250 | 0.00 | 0.08 | 0.285 | O | \| | \| | \| | \| | 0.23 |
| 107.333 | 0.00 | 0.08 | 0.284 | O | \| | \| | \| | \| | 0.23 |
| 107.417 | 0.00 | 0.08 | 0.284 | O | \| | \| | \| | \| | 0.23 |
| 107.500 | 0.00 | 0.08 | 0.283 | O | \| | \| | \| | \| | 0.23 |
| 107.583 | 0.00 | 0.08 | 0.283 | O | \| | \| | \| | \| | 0.23 |
| 107.667 | 0.00 | 0.08 | 0.282 | O | \| | \| | \| | \| | 0.23 |
| 107.750 | 0.00 | 0.08 | 0.282 | O | \| | \| | \| | \| | 0.23 |
| 107.833 | 0.00 | 0.08 | 0.281 | O | \| | \| | \| | \| | 0.23 |
| 107.917 | 0.00 | 0.08 | 0.281 | O | \| | \| | \| | \| | 0.23 |
| 108.000 | 0.00 | 0.08 | 0.280 | O | \| | \| | \| | \| | 0.23 |
| 108.083 | 0.00 | 0.08 | 0.279 | O | \| | \| | \| | \| | 0.23 |
| 108.167 | 0.00 | 0.08 | 0.279 | O | \| | \| | \| | \| | 0.23 |
| 108.250 | 0.00 | 0.08 | 0.278 | O | \| | \| | \| | \| | 0.23 |
| 108.333 | 0.00 | 0.08 | 0.278 | O | \| | \| | \| | \| | 0.23 |
| 108.417 | 0.00 | 0.08 | 0.277 | O | \| | \| | \| | \| | 0.23 |
| 108.500 | 0.00 | 0.08 | 0.277 | O | \| | \| | \| | \| | 0.22 |
| 108.583 | 0.00 | 0.08 | 0.276 | O | \| | \| | \| | \| | 0.22 |
| 108.667 | 0.00 | 0.08 | 0.276 | O | \| | \| | \| | \| | 0.22 |
| 108.750 | 0.00 | 0.08 | 0.275 | O | \| | \| | \| | \| | 0.22 |
| 108.833 | 0.00 | 0.08 | 0.275 | O | \| | \| | \| | \| | 0.22 |
| 108.917 | 0.00 | 0.08 | 0.274 | O | \| | \| | \| | \| | 0.22 |
| 109.000 | 0.00 | 0.08 | 0.274 | O | \| | \| | \| | \| | 0.22 |
| 109.083 | 0.00 | 0.08 | 0.273 | O | \| | \| | \| | \| | 0.22 |
| 109.167 | 0.00 | 0.08 | 0.273 | O | \| | \| | \| | \| | 0.22 |
| 109.250 | 0.00 | 0.08 | 0.272 | O | \| | \| | \| | \| | 0.22 |
| 109.333 | 0.00 | 0.08 | 0.272 | O | \| | \| | \| | \| | 0.22 |
| 109.417 | 0.00 | 0.08 | 0.271 | O | \| | \| | \| | \| | 0.22 |
| 109.500 | 0.00 | 0.08 | 0.270 | O | \| | \| | \| | \| | 0.22 |
| 109.583 | 0.00 | 0.08 | 0.270 | O | \| | \| | \| | \| | 0.22 |
| 109.667 | 0.00 | 0.08 | 0.269 | O | \| | \| | \| | \| | 0.22 |
| 109.750 | 0.00 | 0.08 | 0.269 | O | \| | \| | \| | \| | 0.22 |
| 109.833 | 0.00 | 0.07 | 0.268 | O | \| | \| | \| | \| | 0.22 |
| 109.917 | 0.00 | 0.07 | 0.268 | O | \| | \| | \| | \| | 0.22 |
| 110.000 | 0.00 | 0.07 | 0.267 | O | \| | \| | \| | \| | 0.22 |
| 110.083 | 0.00 | 0.07 | 0.267 | O | \| | \| | \| | \| | 0.22 |
| 110.167 | 0.00 | 0.07 | 0.266 | O | \| | \| | \| | \| | 0.22 |
| 110.250 | 0.00 | 0.07 | 0.266 | O | \| | \| | \| | \| | 0.22 |
| 110.333 | 0.00 | 0.07 | 0.265 | O | \| | \| | \| | \| | 0.22 |
| 110.417 | 0.00 | 0.07 | 0.265 | O | \| | \| | \| | \| | 0.21 |
| 110.500 | 0.00 | 0.07 | 0.264 | O | \| | \| | \| | \| | 0.21 |
| 110.583 | 0.00 | 0.07 | 0.264 | O | \| | \| | \| | \| | 0.21 |
| 110.667 | 0.00 | 0.07 | 0.263 | O | \| | \| | \| | \| | 0.21 |
| 110.750 | 0.00 | 0.07 | 0.263 | O | \| | \| | \| | \| | 0.21 |
| 110.833 | 0.00 | 0.07 | 0.262 | O | \| | \| | \| | \| | 0.21 |
| 110.917 | 0.00 | 0.07 | 0.262 | O | \| | \| | \| | \| | 0.21 |
| 111.000 | 0.00 | 0.07 | 0.261 | O | \| | \| | \| | \| | 0.21 |
| 111.083 | 0.00 | 0.07 | 0.261 | O | \| | \| | \| | \| | 0.21 |
| 111.167 | 0.00 | 0.07 | 0.260 | O | \| | \| | \| | \| | 0.21 |
| 111.250 | 0.00 | 0.07 | 0.260 | O | \| | \| | \| | \| | 0.21 |
| 111.333 | 0.00 | 0.07 | 0.259 | O | \| | \| | \| | \| | 0.21 |
| 111.417 | 0.00 | 0.07 | 0.259 | O | \| | \| | \| | \| | 0.21 |
| 111.500 | 0.00 | 0.07 | 0.258 | O | \| | \| | \| | \| | 0.21 |
| 111.583 | 0.00 | 0.07 | 0.258 | O | \| | \| | \| | \| | 0.21 |
| 111.667 | 0.00 | 0.07 | 0.257 | O | \| | \| | \| | \| | 0.21 |
| 111.750 | 0.00 | 0.07 | 0.257 | O | \| | \| | \| | \| | 0.21 |
| 111.833 | 0.00 | 0.07 | 0.256 | O | \| | \| | \| | \| | 0.21 |
| 111.917 | 0.00 | 0.07 | 0.256 | O | \| | \| | \| | \| | 0.21 |
| 112.000 | 0.00 | 0.07 | 0.255 | O | \| | \| | \| | \| | 0.21 |
| 112.083 | 0.00 | 0.07 | 0.255 | O | \| | \| | \| | \| | 0.21 |
| 112.167 | 0.00 | 0.07 | 0.254 | O | \| | \| | \| | \| | 0.21 |
| 112.250 | 0.00 | 0.07 | 0.254 | O | \| | \| | \| | \| | 0.21 |
| 112.333 | 0.00 | 0.07 | 0.253 | O | \| | \| | \| | \| | 0.21 |
| 112.417 | 0.00 | 0.07 | 0.253 | O | \| | \| | \| | \| | 0.21 |
| 112.500 | 0.00 | 0.07 | 0.252 | O | \| | \| | \| | \| | 0.20 |
| 112.583 | 0.00 | 0.07 | 0.252 | O | \| | \| | \| | \| | 0.20 |

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|---|---|---|---|---|---|---|---|---|---|
| 112.667 | 0.00 | 0.07 | 0.251 | O | \| | \| | \| | \| | 0.20 |
| 112.750 | 0.00 | 0.07 | 0.251 | O | \| | \| | \| | \| | 0.20 |
| 112.833 | 0.00 | 0.07 | 0.250 | O | \| | \| | \| | \| | 0.20 |
| 112.917 | 0.00 | 0.07 | 0.250 | O | \| | \| | \| | \| | 0.20 |
| 113.000 | 0.00 | 0.07 | 0.249 | O | \| | \| | \| | \| | 0.20 |
| 113.083 | 0.00 | 0.07 | 0.249 | O | \| | \| | \| | \| | 0.20 |
| 113.167 | 0.00 | 0.07 | 0.249 | O | \| | \| | \| | \| | 0.20 |
| 113.250 | 0.00 | 0.07 | 0.248 | O | \| | \| | \| | \| | 0.20 |
| 113.333 | 0.00 | 0.07 | 0.248 | O | \| | \| | \| | \| | 0.20 |
| 113.417 | 0.00 | 0.07 | 0.247 | O | \| | \| | \| | \| | 0.20 |
| 113.500 | 0.00 | 0.07 | 0.247 | O | \| | \| | \| | \| | 0.20 |
| 113.583 | 0.00 | 0.07 | 0.246 | O | \| | \| | \| | \| | 0.20 |
| 113.667 | 0.00 | 0.07 | 0.246 | O | \| | \| | \| | \| | 0.20 |
| 113.750 | 0.00 | 0.07 | 0.245 | O | \| | \| | \| | \| | 0.20 |
| 113.833 | 0.00 | 0.07 | 0.245 | O | \| | \| | \| | \| | 0.20 |
| 113.917 | 0.00 | 0.07 | 0.244 | O | \| | \| | \| | \| | 0.20 |
| 114.000 | 0.00 | 0.07 | 0.244 | O | \| | \| | \| | \| | 0.20 |
| 114.083 | 0.00 | 0.07 | 0.243 | O | \| | \| | \| | \| | 0.20 |
| 114.167 | 0.00 | 0.07 | 0.243 | O | \| | \| | \| | \| | 0.20 |
| 114.250 | 0.00 | 0.07 | 0.242 | O | \| | \| | \| | \| | 0.20 |
| 114.333 | 0.00 | 0.07 | 0.242 | O | \| | \| | \| | \| | 0.20 |
| 114.417 | 0.00 | 0.07 | 0.241 | O | \| | \| | \| | \| | 0.20 |
| 114.500 | 0.00 | 0.07 | 0.241 | O | \| | \| | \| | \| | 0.20 |
| 114.583 | 0.00 | 0.07 | 0.241 | O | \| | \| | \| | \| | 0.20 |
| 114.667 | 0.00 | 0.07 | 0.240 | O | \| | \| | \| | \| | 0.19 |
| 114.750 | 0.00 | 0.07 | 0.240 | O | \| | \| | \| | \| | 0.19 |
| 114.833 | 0.00 | 0.07 | 0.239 | O | \| | \| | \| | \| | 0.19 |
| 114.917 | 0.00 | 0.07 | 0.239 | O | \| | \| | \| | \| | 0.19 |
| 115.000 | 0.00 | 0.07 | 0.238 | O | \| | \| | \| | \| | 0.19 |
| 115.083 | 0.00 | 0.07 | 0.238 | O | \| | \| | \| | \| | 0.19 |
| 115.167 | 0.00 | 0.07 | 0.237 | O | \| | \| | \| | \| | 0.19 |
| 115.250 | 0.00 | 0.07 | 0.237 | O | \| | \| | \| | \| | 0.19 |
| 115.333 | 0.00 | 0.07 | 0.236 | O | \| | \| | \| | \| | 0.19 |
| 115.417 | 0.00 | 0.07 | 0.236 | O | \| | \| | \| | \| | 0.19 |
| 115.500 | 0.00 | 0.07 | 0.235 | O | \| | \| | \| | \| | 0.19 |
| 115.583 | 0.00 | 0.07 | 0.235 | O | \| | \| | \| | \| | 0.19 |
| 115.667 | 0.00 | 0.07 | 0.235 | O | \| | \| | \| | \| | 0.19 |
| 115.750 | 0.00 | 0.07 | 0.234 | O | \| | \| | \| | \| | 0.19 |
| 115.833 | 0.00 | 0.07 | 0.234 | O | \| | \| | \| | \| | 0.19 |
| 115.917 | 0.00 | 0.07 | 0.233 | O | \| | \| | \| | \| | 0.19 |
| 116.000 | 0.00 | 0.06 | 0.233 | O | \| | \| | \| | \| | 0.19 |
| 116.083 | 0.00 | 0.06 | 0.232 | O | \| | \| | \| | \| | 0.19 |
| 116.167 | 0.00 | 0.06 | 0.232 | O | \| | \| | \| | \| | 0.19 |
| 116.250 | 0.00 | 0.06 | 0.231 | O | \| | \| | \| | \| | 0.19 |
| 116.333 | 0.00 | 0.06 | 0.231 | O | \| | \| | \| | \| | 0.19 |
| 116.417 | 0.00 | 0.06 | 0.231 | O | \| | \| | \| | \| | 0.19 |
| 116.500 | 0.00 | 0.06 | 0.230 | O | \| | \| | \| | \| | 0.19 |
| 116.583 | 0.00 | 0.06 | 0.230 | O | \| | \| | \| | \| | 0.19 |
| 116.667 | 0.00 | 0.06 | 0.229 | O | \| | \| | \| | \| | 0.19 |
| 116.750 | 0.00 | 0.06 | 0.229 | O | \| | \| | \| | \| | 0.19 |
| 116.833 | 0.00 | 0.06 | 0.228 | O | \| | \| | \| | \| | 0.19 |
| 116.917 | 0.00 | 0.06 | 0.228 | O | \| | \| | \| | \| | 0.18 |
| 117.000 | 0.00 | 0.06 | 0.227 | O | \| | \| | \| | \| | 0.18 |
| 117.083 | 0.00 | 0.06 | 0.227 | O | \| | \| | \| | \| | 0.18 |
| 117.167 | 0.00 | 0.06 | 0.227 | O | \| | \| | \| | \| | 0.18 |
| 117.250 | 0.00 | 0.06 | 0.226 | O | \| | \| | \| | \| | 0.18 |
| 117.333 | 0.00 | 0.06 | 0.226 | O | \| | \| | \| | \| | 0.18 |
| 117.417 | 0.00 | 0.06 | 0.225 | O | \| | \| | \| | \| | 0.18 |
| 117.500 | 0.00 | 0.06 | 0.225 | O | \| | \| | \| | \| | 0.18 |
| 117.583 | 0.00 | 0.06 | 0.224 | O | \| | \| | \| | \| | 0.18 |
| 117.667 | 0.00 | 0.06 | 0.224 | O | \| | \| | \| | \| | 0.18 |
| 117.750 | 0.00 | 0.06 | 0.224 | O | \| | \| | \| | \| | 0.18 |
| 117.833 | 0.00 | 0.06 | 0.223 | O | \| | \| | \| | \| | 0.18 |
| 117.917 | 0.00 | 0.06 | 0.223 | O | \| | \| | \| | \| | 0.18 |
| 118.000 | 0.00 | 0.06 | 0.222 | O | \| | \| | \| | \| | 0.18 |
| 118.083 | 0.00 | 0.06 | 0.222 | O | \| | \| | \| | \| | 0.18 |
| 118.167 | 0.00 | 0.06 | 0.221 | O | \| | \| | \| | \| | 0.18 |
| 118.250 | 0.00 | 0.06 | 0.221 | O | \| | \| | \| | \| | 0.18 |
| 118.333 | 0.00 | 0.06 | 0.221 | O | \| | \| | \| | \| | 0.18 |
| 118.417 | 0.00 | 0.06 | 0.220 | O | \| | \| | \| | \| | 0.18 |
| 118.500 | 0.00 | 0.06 | 0.220 | O | \| | \| | \| | \| | 0.18 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 118.583 | 0.00 | 0.06 | 0.219 | O | \| | \| | \| | \| | 0.18 |
| 118.667 | 0.00 | 0.06 | 0.219 | O | \| | \| | \| | \| | 0.18 |
| 118.750 | 0.00 | 0.06 | 0.218 | O | \| | \| | \| | \| | 0.18 |
| 118.833 | 0.00 | 0.06 | 0.218 | O | \| | \| | \| | \| | 0.18 |
| 118.917 | 0.00 | 0.06 | 0.218 | O | \| | \| | \| | \| | 0.18 |
| 119.000 | 0.00 | 0.06 | 0.217 | O | \| | \| | \| | \| | 0.18 |
| 119.083 | 0.00 | 0.06 | 0.217 | O | \| | \| | \| | \| | 0.18 |
| 119.167 | 0.00 | 0.06 | 0.216 | O | \| | \| | \| | \| | 0.18 |
| 119.250 | 0.00 | 0.06 | 0.216 | O | \| | \| | \| | \| | 0.18 |
| 119.333 | 0.00 | 0.06 | 0.216 | O | \| | \| | \| | \| | 0.17 |
| 119.417 | 0.00 | 0.06 | 0.215 | O | \| | \| | \| | \| | 0.17 |
| 119.500 | 0.00 | 0.06 | 0.215 | O | \| | \| | \| | \| | 0.17 |
| 119.583 | 0.00 | 0.06 | 0.214 | O | \| | \| | \| | \| | 0.17 |
| 119.667 | 0.00 | 0.06 | 0.214 | O | \| | \| | \| | \| | 0.17 |
| 119.750 | 0.00 | 0.06 | 0.213 | O | \| | \| | \| | \| | 0.17 |
| 119.833 | 0.00 | 0.06 | 0.213 | O | \| | \| | \| | \| | 0.17 |
| 119.917 | 0.00 | 0.06 | 0.213 | O | \| | \| | \| | \| | 0.17 |
| 120.000 | 0.00 | 0.06 | 0.212 | O | \| | \| | \| | \| | 0.17 |
| 120.083 | 0.00 | 0.06 | 0.212 | O | \| | \| | \| | \| | 0.17 |
| 120.167 | 0.00 | 0.06 | 0.211 | O | \| | \| | \| | \| | 0.17 |
| 120.250 | 0.00 | 0.06 | 0.211 | O | \| | \| | \| | \| | 0.17 |
| 120.333 | 0.00 | 0.06 | 0.211 | O | \| | \| | \| | \| | 0.17 |
| 120.417 | 0.00 | 0.06 | 0.210 | O | \| | \| | \| | \| | 0.17 |
| 120.500 | 0.00 | 0.06 | 0.210 | O | \| | \| | \| | \| | 0.17 |
| 120.583 | 0.00 | 0.06 | 0.209 | O | \| | \| | \| | \| | 0.17 |
| 120.667 | 0.00 | 0.06 | 0.209 | O | \| | \| | \| | \| | 0.17 |
| 120.750 | 0.00 | 0.06 | 0.209 | O | \| | \| | \| | \| | 0.17 |
| 120.833 | 0.00 | 0.06 | 0.208 | O | \| | \| | \| | \| | 0.17 |
| 120.917 | 0.00 | 0.06 | 0.208 | O | \| | \| | \| | \| | 0.17 |
| 121.000 | 0.00 | 0.06 | 0.207 | O | \| | \| | \| | \| | 0.17 |
| 121.083 | 0.00 | 0.06 | 0.207 | O | \| | \| | \| | \| | 0.17 |
| 121.167 | 0.00 | 0.06 | 0.207 | O | \| | \| | \| | \| | 0.17 |
| 121.250 | 0.00 | 0.06 | 0.206 | O | \| | \| | \| | \| | 0.17 |
| 121.333 | 0.00 | 0.06 | 0.206 | O | \| | \| | \| | \| | 0.17 |
| 121.417 | 0.00 | 0.06 | 0.205 | O | \| | \| | \| | \| | 0.17 |
| 121.500 | 0.00 | 0.06 | 0.205 | O | \| | \| | \| | \| | 0.17 |
| 121.583 | 0.00 | 0.06 | 0.205 | O | \| | \| | \| | \| | 0.17 |
| 121.667 | 0.00 | 0.06 | 0.204 | O | \| | \| | \| | \| | 0.17 |
| 121.750 | 0.00 | 0.06 | 0.204 | O | \| | \| | \| | \| | 0.17 |
| 121.833 | 0.00 | 0.06 | 0.203 | O | \| | \| | \| | \| | 0.17 |
| 121.917 | 0.00 | 0.06 | 0.203 | O | \| | \| | \| | \| | 0.16 |
| 122.000 | 0.00 | 0.06 | 0.203 | O | \| | \| | \| | \| | 0.16 |
| 122.083 | 0.00 | 0.06 | 0.202 | O | \| | \| | \| | \| | 0.16 |
| 122.167 | 0.00 | 0.06 | 0.202 | O | \| | \| | \| | \| | 0.16 |
| 122.250 | 0.00 | 0.06 | 0.202 | O | \| | \| | \| | \| | 0.16 |
| 122.333 | 0.00 | 0.06 | 0.201 | O | \| | \| | \| | \| | 0.16 |
| 122.417 | 0.00 | 0.06 | 0.201 | O | \| | \| | \| | \| | 0.16 |
| 122.500 | 0.00 | 0.06 | 0.200 | O | \| | \| | \| | \| | 0.16 |
| 122.583 | 0.00 | 0.06 | 0.200 | O | \| | \| | \| | \| | 0.16 |
| 122.667 | 0.00 | 0.06 | 0.200 | O | \| | \| | \| | \| | 0.16 |
| 122.750 | 0.00 | 0.06 | 0.199 | O | \| | \| | \| | \| | 0.16 |
| 122.833 | 0.00 | 0.06 | 0.199 | O | \| | \| | \| | \| | 0.16 |
| 122.917 | 0.00 | 0.06 | 0.198 | O | \| | \| | \| | \| | 0.16 |
| 123.000 | 0.00 | 0.06 | 0.198 | O | \| | \| | \| | \| | 0.16 |
| 123.083 | 0.00 | 0.06 | 0.198 | O | \| | \| | \| | \| | 0.16 |
| 123.167 | 0.00 | 0.06 | 0.197 | O | \| | \| | \| | \| | 0.16 |
| 123.250 | 0.00 | 0.05 | 0.197 | O | \| | \| | \| | \| | 0.16 |
| 123.333 | 0.00 | 0.05 | 0.197 | O | \| | \| | \| | \| | 0.16 |
| 123.417 | 0.00 | 0.05 | 0.196 | O | \| | \| | \| | \| | 0.16 |
| 123.500 | 0.00 | 0.05 | 0.196 | O | \| | \| | \| | \| | 0.16 |
| 123.583 | 0.00 | 0.05 | 0.195 | O | \| | \| | \| | \| | 0.16 |
| 123.667 | 0.00 | 0.05 | 0.195 | O | \| | \| | \| | \| | 0.16 |
| 123.750 | 0.00 | 0.05 | 0.195 | O | \| | \| | \| | \| | 0.16 |
| 123.833 | 0.00 | 0.05 | 0.194 | O | \| | \| | \| | \| | 0.16 |
| 123.917 | 0.00 | 0.05 | 0.194 | O | \| | \| | \| | \| | 0.16 |
| 124.000 | 0.00 | 0.05 | 0.194 | O | \| | \| | \| | \| | 0.16 |
| 124.083 | 0.00 | 0.05 | 0.193 | O | \| | \| | \| | \| | 0.16 |
| 124.167 | 0.00 | 0.05 | 0.193 | O | \| | \| | \| | \| | 0.16 |
| 124.250 | 0.00 | 0.05 | 0.192 | O | \| | \| | \| | \| | 0.16 |
| 124.333 | 0.00 | 0.05 | 0.192 | O | \| | \| | \| | \| | 0.16 |
| 124.417 | 0.00 | 0.05 | 0.192 | O | \| | \| | \| | \| | 0.16 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 124.500 | 0.00 | 0.05 | 0.191 | O | \| | \| | \| | \| | 0.16 |
| 124.583 | 0.00 | 0.05 | 0.191 | O | \| | \| | \| | \| | 0.16 |
| 124.667 | 0.00 | 0.05 | 0.191 | O | \| | \| | \| | \| | 0.15 |
| 124.750 | 0.00 | 0.05 | 0.190 | O | \| | \| | \| | \| | 0.15 |
| 124.833 | 0.00 | 0.05 | 0.190 | O | \| | \| | \| | \| | 0.15 |
| 124.917 | 0.00 | 0.05 | 0.189 | O | \| | \| | \| | \| | 0.15 |
| 125.000 | 0.00 | 0.05 | 0.189 | O | \| | \| | \| | \| | 0.15 |
| 125.083 | 0.00 | 0.05 | 0.189 | O | \| | \| | \| | \| | 0.15 |
| 125.167 | 0.00 | 0.05 | 0.188 | O | \| | \| | \| | \| | 0.15 |
| 125.250 | 0.00 | 0.05 | 0.188 | O | \| | \| | \| | \| | 0.15 |
| 125.333 | 0.00 | 0.05 | 0.188 | O | \| | \| | \| | \| | 0.15 |
| 125.417 | 0.00 | 0.05 | 0.187 | O | \| | \| | \| | \| | 0.15 |
| 125.500 | 0.00 | 0.05 | 0.187 | O | \| | \| | \| | \| | 0.15 |
| 125.583 | 0.00 | 0.05 | 0.187 | O | \| | \| | \| | \| | 0.15 |
| 125.667 | 0.00 | 0.05 | 0.186 | O | \| | \| | \| | \| | 0.15 |
| 125.750 | 0.00 | 0.05 | 0.186 | O | \| | \| | \| | \| | 0.15 |
| 125.833 | 0.00 | 0.05 | 0.186 | O | \| | \| | \| | \| | 0.15 |
| 125.917 | 0.00 | 0.05 | 0.185 | O | \| | \| | \| | \| | 0.15 |
| 126.000 | 0.00 | 0.05 | 0.185 | O | \| | \| | \| | \| | 0.15 |
| 126.083 | 0.00 | 0.05 | 0.184 | O | \| | \| | \| | \| | 0.15 |
| 126.167 | 0.00 | 0.05 | 0.184 | O | \| | \| | \| | \| | 0.15 |
| 126.250 | 0.00 | 0.05 | 0.184 | O | \| | \| | \| | \| | 0.15 |
| 126.333 | 0.00 | 0.05 | 0.183 | O | \| | \| | \| | \| | 0.15 |
| 126.417 | 0.00 | 0.05 | 0.183 | O | \| | \| | \| | \| | 0.15 |
| 126.500 | 0.00 | 0.05 | 0.183 | O | \| | \| | \| | \| | 0.15 |
| 126.583 | 0.00 | 0.05 | 0.182 | O | \| | \| | \| | \| | 0.15 |
| 126.667 | 0.00 | 0.05 | 0.182 | O | \| | \| | \| | \| | 0.15 |
| 126.750 | 0.00 | 0.05 | 0.182 | O | \| | \| | \| | \| | 0.15 |
| 126.833 | 0.00 | 0.05 | 0.181 | O | \| | \| | \| | \| | 0.15 |
| 126.917 | 0.00 | 0.05 | 0.181 | O | \| | \| | \| | \| | 0.15 |
| 127.000 | 0.00 | 0.05 | 0.181 | O | \| | \| | \| | \| | 0.15 |
| 127.083 | 0.00 | 0.05 | 0.180 | O | \| | \| | \| | \| | 0.15 |
| 127.167 | 0.00 | 0.05 | 0.180 | O | \| | \| | \| | \| | 0.15 |
| 127.250 | 0.00 | 0.05 | 0.180 | O | \| | \| | \| | \| | 0.15 |
| 127.333 | 0.00 | 0.05 | 0.179 | O | \| | \| | \| | \| | 0.15 |
| 127.417 | 0.00 | 0.05 | 0.179 | O | \| | \| | \| | \| | 0.15 |
| 127.500 | 0.00 | 0.05 | 0.179 | O | \| | \| | \| | \| | 0.14 |
| 127.583 | 0.00 | 0.05 | 0.178 | O | \| | \| | \| | \| | 0.14 |
| 127.667 | 0.00 | 0.05 | 0.178 | O | \| | \| | \| | \| | 0.14 |
| 127.750 | 0.00 | 0.05 | 0.178 | O | \| | \| | \| | \| | 0.14 |
| 127.833 | 0.00 | 0.05 | 0.177 | O | \| | \| | \| | \| | 0.14 |
| 127.917 | 0.00 | 0.05 | 0.177 | O | \| | \| | \| | \| | 0.14 |
| 128.000 | 0.00 | 0.05 | 0.176 | O | \| | \| | \| | \| | 0.14 |
| 128.083 | 0.00 | 0.05 | 0.176 | O | \| | \| | \| | \| | 0.14 |
| 128.167 | 0.00 | 0.05 | 0.176 | O | \| | \| | \| | \| | 0.14 |
| 128.250 | 0.00 | 0.05 | 0.175 | O | \| | \| | \| | \| | 0.14 |
| 128.333 | 0.00 | 0.05 | 0.175 | O | \| | \| | \| | \| | 0.14 |
| 128.417 | 0.00 | 0.05 | 0.175 | O | \| | \| | \| | \| | 0.14 |
| 128.500 | 0.00 | 0.05 | 0.174 | O | \| | \| | \| | \| | 0.14 |
| 128.583 | 0.00 | 0.05 | 0.174 | O | \| | \| | \| | \| | 0.14 |
| 128.667 | 0.00 | 0.05 | 0.174 | O | \| | \| | \| | \| | 0.14 |
| 128.750 | 0.00 | 0.05 | 0.173 | O | \| | \| | \| | \| | 0.14 |
| 128.833 | 0.00 | 0.05 | 0.173 | O | \| | \| | \| | \| | 0.14 |
| 128.917 | 0.00 | 0.05 | 0.173 | O | \| | \| | \| | \| | 0.14 |
| 129.000 | 0.00 | 0.05 | 0.172 | O | \| | \| | \| | \| | 0.14 |
| 129.083 | 0.00 | 0.05 | 0.172 | O | \| | \| | \| | \| | 0.14 |
| 129.167 | 0.00 | 0.05 | 0.172 | O | \| | \| | \| | \| | 0.14 |
| 129.250 | 0.00 | 0.05 | 0.171 | O | \| | \| | \| | \| | 0.14 |
| 129.333 | 0.00 | 0.05 | 0.171 | O | \| | \| | \| | \| | 0.14 |
| 129.417 | 0.00 | 0.05 | 0.171 | O | \| | \| | \| | \| | 0.14 |
| 129.500 | 0.00 | 0.05 | 0.170 | O | \| | \| | \| | \| | 0.14 |
| 129.583 | 0.00 | 0.05 | 0.170 | O | \| | \| | \| | \| | 0.14 |
| 129.667 | 0.00 | 0.05 | 0.170 | O | \| | \| | \| | \| | 0.14 |
| 129.750 | 0.00 | 0.05 | 0.169 | O | \| | \| | \| | \| | 0.14 |
| 129.833 | 0.00 | 0.05 | 0.169 | O | \| | \| | \| | \| | 0.14 |
| 129.917 | 0.00 | 0.05 | 0.169 | O | \| | \| | \| | \| | 0.14 |
| 130.000 | 0.00 | 0.05 | 0.169 | O | \| | \| | \| | \| | 0.14 |
| 130.083 | 0.00 | 0.05 | 0.168 | O | \| | \| | \| | \| | 0.14 |
| 130.167 | 0.00 | 0.05 | 0.168 | O | \| | \| | \| | \| | 0.14 |
| 130.250 | 0.00 | 0.05 | 0.168 | O | \| | \| | \| | \| | 0.14 |
| 130.333 | 0.00 | 0.05 | 0.167 | O | \| | \| | \| | \| | 0.14 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 130.417 | 0.00 | 0.05 | 0.167 | O | \| | \| | \| | \| | 0.14 |
| 130.500 | 0.00 | 0.05 | 0.167 | O | \| | \| | \| | \| | 0.14 |
| 130.583 | 0.00 | 0.05 | 0.166 | O | \| | \| | \| | \| | 0.13 |
| 130.667 | 0.00 | 0.05 | 0.166 | O | \| | \| | \| | \| | 0.13 |
| 130.750 | 0.00 | 0.05 | 0.166 | O | \| | \| | \| | \| | 0.13 |
| 130.833 | 0.00 | 0.05 | 0.165 | O | \| | \| | \| | \| | 0.13 |
| 130.917 | 0.00 | 0.05 | 0.165 | O | \| | \| | \| | \| | 0.13 |
| 131.000 | 0.00 | 0.05 | 0.165 | O | \| | \| | \| | \| | 0.13 |
| 131.083 | 0.00 | 0.05 | 0.164 | O | \| | \| | \| | \| | 0.13 |
| 131.167 | 0.00 | 0.05 | 0.164 | O | \| | \| | \| | \| | 0.13 |
| 131.250 | 0.00 | 0.05 | 0.164 | O | \| | \| | \| | \| | 0.13 |
| 131.333 | 0.00 | 0.05 | 0.163 | O | \| | \| | \| | \| | 0.13 |
| 131.417 | 0.00 | 0.05 | 0.163 | O | \| | \| | \| | \| | 0.13 |
| 131.500 | 0.00 | 0.05 | 0.163 | O | \| | \| | \| | \| | 0.13 |
| 131.583 | 0.00 | 0.05 | 0.162 | O | \| | \| | \| | \| | 0.13 |
| 131.667 | 0.00 | 0.05 | 0.162 | O | \| | \| | \| | \| | 0.13 |
| 131.750 | 0.00 | 0.05 | 0.162 | O | \| | \| | \| | \| | 0.13 |
| 131.833 | 0.00 | 0.05 | 0.162 | O | \| | \| | \| | \| | 0.13 |
| 131.917 | 0.00 | 0.05 | 0.161 | O | \| | \| | \| | \| | 0.13 |
| 132.000 | 0.00 | 0.04 | 0.161 | O | \| | \| | \| | \| | 0.13 |
| 132.083 | 0.00 | 0.04 | 0.161 | O | \| | \| | \| | \| | 0.13 |
| 132.167 | 0.00 | 0.04 | 0.160 | O | \| | \| | \| | \| | 0.13 |
| 132.250 | 0.00 | 0.04 | 0.160 | O | \| | \| | \| | \| | 0.13 |
| 132.333 | 0.00 | 0.04 | 0.160 | O | \| | \| | \| | \| | 0.13 |
| 132.417 | 0.00 | 0.04 | 0.159 | O | \| | \| | \| | \| | 0.13 |
| 132.500 | 0.00 | 0.04 | 0.159 | O | \| | \| | \| | \| | 0.13 |
| 132.583 | 0.00 | 0.04 | 0.159 | O | \| | \| | \| | \| | 0.13 |
| 132.667 | 0.00 | 0.04 | 0.158 | O | \| | \| | \| | \| | 0.13 |
| 132.750 | 0.00 | 0.04 | 0.158 | O | \| | \| | \| | \| | 0.13 |
| 132.833 | 0.00 | 0.04 | 0.158 | O | \| | \| | \| | \| | 0.13 |
| 132.917 | 0.00 | 0.04 | 0.158 | O | \| | \| | \| | \| | 0.13 |
| 133.000 | 0.00 | 0.04 | 0.157 | O | \| | \| | \| | \| | 0.13 |
| 133.083 | 0.00 | 0.04 | 0.157 | O | \| | \| | \| | \| | 0.13 |
| 133.167 | 0.00 | 0.04 | 0.157 | O | \| | \| | \| | \| | 0.13 |
| 133.250 | 0.00 | 0.04 | 0.156 | O | \| | \| | \| | \| | 0.13 |
| 133.333 | 0.00 | 0.04 | 0.156 | O | \| | \| | \| | \| | 0.13 |
| 133.417 | 0.00 | 0.04 | 0.156 | O | \| | \| | \| | \| | 0.13 |
| 133.500 | 0.00 | 0.04 | 0.155 | O | \| | \| | \| | \| | 0.13 |
| 133.583 | 0.00 | 0.04 | 0.155 | O | \| | \| | \| | \| | 0.13 |
| 133.667 | 0.00 | 0.04 | 0.155 | O | \| | \| | \| | \| | 0.13 |
| 133.750 | 0.00 | 0.04 | 0.155 | O | \| | \| | \| | \| | 0.13 |
| 133.833 | 0.00 | 0.04 | 0.154 | O | \| | \| | \| | \| | 0.13 |
| 133.917 | 0.00 | 0.04 | 0.154 | O | \| | \| | \| | \| | 0.12 |
| 134.000 | 0.00 | 0.04 | 0.154 | O | \| | \| | \| | \| | 0.12 |
| 134.083 | 0.00 | 0.04 | 0.153 | O | \| | \| | \| | \| | 0.12 |
| 134.167 | 0.00 | 0.04 | 0.153 | O | \| | \| | \| | \| | 0.12 |
| 134.250 | 0.00 | 0.04 | 0.153 | O | \| | \| | \| | \| | 0.12 |
| 134.333 | 0.00 | 0.04 | 0.152 | O | \| | \| | \| | \| | 0.12 |
| 134.417 | 0.00 | 0.04 | 0.152 | O | \| | \| | \| | \| | 0.12 |
| 134.500 | 0.00 | 0.04 | 0.152 | O | \| | \| | \| | \| | 0.12 |
| 134.583 | 0.00 | 0.04 | 0.152 | O | \| | \| | \| | \| | 0.12 |
| 134.667 | 0.00 | 0.04 | 0.151 | O | \| | \| | \| | \| | 0.12 |
| 134.750 | 0.00 | 0.04 | 0.151 | O | \| | \| | \| | \| | 0.12 |
| 134.833 | 0.00 | 0.04 | 0.151 | O | \| | \| | \| | \| | 0.12 |
| 134.917 | 0.00 | 0.04 | 0.150 | O | \| | \| | \| | \| | 0.12 |
| 135.000 | 0.00 | 0.04 | 0.150 | O | \| | \| | \| | \| | 0.12 |
| 135.083 | 0.00 | 0.04 | 0.150 | O | \| | \| | \| | \| | 0.12 |
| 135.167 | 0.00 | 0.04 | 0.150 | O | \| | \| | \| | \| | 0.12 |
| 135.250 | 0.00 | 0.04 | 0.149 | O | \| | \| | \| | \| | 0.12 |
| 135.333 | 0.00 | 0.04 | 0.149 | O | \| | \| | \| | \| | 0.12 |
| 135.417 | 0.00 | 0.04 | 0.149 | O | \| | \| | \| | \| | 0.12 |
| 135.500 | 0.00 | 0.04 | 0.148 | O | \| | \| | \| | \| | 0.12 |
| 135.583 | 0.00 | 0.04 | 0.148 | O | \| | \| | \| | \| | 0.12 |
| 135.667 | 0.00 | 0.04 | 0.148 | O | \| | \| | \| | \| | 0.12 |
| 135.750 | 0.00 | 0.04 | 0.148 | O | \| | \| | \| | \| | 0.12 |
| 135.833 | 0.00 | 0.04 | 0.147 | O | \| | \| | \| | \| | 0.12 |
| 135.917 | 0.00 | 0.04 | 0.147 | O | \| | \| | \| | \| | 0.12 |
| 136.000 | 0.00 | 0.04 | 0.147 | O | \| | \| | \| | \| | 0.12 |
| 136.083 | 0.00 | 0.04 | 0.146 | O | \| | \| | \| | \| | 0.12 |
| 136.167 | 0.00 | 0.04 | 0.146 | O | \| | \| | \| | \| | 0.12 |
| 136.250 | 0.00 | 0.04 | 0.146 | O | \| | \| | \| | \| | 0.12 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 136.333 | 0.00 | 0.04 | 0.146 | O | \| | \| | \| | \| | 0.12 |
| 136.417 | 0.00 | 0.04 | 0.145 | O | \| | \| | \| | \| | 0.12 |
| 136.500 | 0.00 | 0.04 | 0.145 | O | \| | \| | \| | \| | 0.12 |
| 136.583 | 0.00 | 0.04 | 0.145 | O | \| | \| | \| | \| | 0.12 |
| 136.667 | 0.00 | 0.04 | 0.144 | O | \| | \| | \| | \| | 0.12 |
| 136.750 | 0.00 | 0.04 | 0.144 | O | \| | \| | \| | \| | 0.12 |
| 136.833 | 0.00 | 0.04 | 0.144 | O | \| | \| | \| | \| | 0.12 |
| 136.917 | 0.00 | 0.04 | 0.144 | O | \| | \| | \| | \| | 0.12 |
| 137.000 | 0.00 | 0.04 | 0.143 | O | \| | \| | \| | \| | 0.12 |
| 137.083 | 0.00 | 0.04 | 0.143 | O | \| | \| | \| | \| | 0.12 |
| 137.167 | 0.00 | 0.04 | 0.143 | O | \| | \| | \| | \| | 0.12 |
| 137.250 | 0.00 | 0.04 | 0.143 | O | \| | \| | \| | \| | 0.12 |
| 137.333 | 0.00 | 0.04 | 0.142 | O | \| | \| | \| | \| | 0.12 |
| 137.417 | 0.00 | 0.04 | 0.142 | O | \| | \| | \| | \| | 0.12 |
| 137.500 | 0.00 | 0.04 | 0.142 | O | \| | \| | \| | \| | 0.12 |
| 137.583 | 0.00 | 0.04 | 0.141 | O | \| | \| | \| | \| | 0.11 |
| 137.667 | 0.00 | 0.04 | 0.141 | O | \| | \| | \| | \| | 0.11 |
| 137.750 | 0.00 | 0.04 | 0.141 | O | \| | \| | \| | \| | 0.11 |
| 137.833 | 0.00 | 0.04 | 0.141 | O | \| | \| | \| | \| | 0.11 |
| 137.917 | 0.00 | 0.04 | 0.140 | O | \| | \| | \| | \| | 0.11 |
| 138.000 | 0.00 | 0.04 | 0.140 | O | \| | \| | \| | \| | 0.11 |
| 138.083 | 0.00 | 0.04 | 0.140 | O | \| | \| | \| | \| | 0.11 |
| 138.167 | 0.00 | 0.04 | 0.140 | O | \| | \| | \| | \| | 0.11 |
| 138.250 | 0.00 | 0.04 | 0.139 | O | \| | \| | \| | \| | 0.11 |
| 138.333 | 0.00 | 0.04 | 0.139 | O | \| | \| | \| | \| | 0.11 |
| 138.417 | 0.00 | 0.04 | 0.139 | O | \| | \| | \| | \| | 0.11 |
| 138.500 | 0.00 | 0.04 | 0.139 | O | \| | \| | \| | \| | 0.11 |
| 138.583 | 0.00 | 0.04 | 0.138 | O | \| | \| | \| | \| | 0.11 |
| 138.667 | 0.00 | 0.04 | 0.138 | O | \| | \| | \| | \| | 0.11 |
| 138.750 | 0.00 | 0.04 | 0.138 | O | \| | \| | \| | \| | 0.11 |
| 138.833 | 0.00 | 0.04 | 0.137 | O | \| | \| | \| | \| | 0.11 |
| 138.917 | 0.00 | 0.04 | 0.137 | O | \| | \| | \| | \| | 0.11 |
| 139.000 | 0.00 | 0.04 | 0.137 | O | \| | \| | \| | \| | 0.11 |
| 139.083 | 0.00 | 0.04 | 0.137 | O | \| | \| | \| | \| | 0.11 |
| 139.167 | 0.00 | 0.04 | 0.136 | O | \| | \| | \| | \| | 0.11 |
| 139.250 | 0.00 | 0.04 | 0.136 | O | \| | \| | \| | \| | 0.11 |
| 139.333 | 0.00 | 0.04 | 0.136 | O | \| | \| | \| | \| | 0.11 |
| 139.417 | 0.00 | 0.04 | 0.136 | O | \| | \| | \| | \| | 0.11 |
| 139.500 | 0.00 | 0.04 | 0.135 | O | \| | \| | \| | \| | 0.11 |
| 139.583 | 0.00 | 0.04 | 0.135 | O | \| | \| | \| | \| | 0.11 |
| 139.667 | 0.00 | 0.04 | 0.135 | O | \| | \| | \| | \| | 0.11 |
| 139.750 | 0.00 | 0.04 | 0.135 | O | \| | \| | \| | \| | 0.11 |
| 139.833 | 0.00 | 0.04 | 0.134 | O | \| | \| | \| | \| | 0.11 |
| 139.917 | 0.00 | 0.04 | 0.134 | O | \| | \| | \| | \| | 0.11 |
| 140.000 | 0.00 | 0.04 | 0.134 | O | \| | \| | \| | \| | 0.11 |
| 140.083 | 0.00 | 0.04 | 0.134 | O | \| | \| | \| | \| | 0.11 |
| 140.167 | 0.00 | 0.04 | 0.133 | O | \| | \| | \| | \| | 0.11 |
| 140.250 | 0.00 | 0.04 | 0.133 | O | \| | \| | \| | \| | 0.11 |
| 140.333 | 0.00 | 0.04 | 0.133 | O | \| | \| | \| | \| | 0.11 |
| 140.417 | 0.00 | 0.04 | 0.133 | O | \| | \| | \| | \| | 0.11 |
| 140.500 | 0.00 | 0.04 | 0.132 | O | \| | \| | \| | \| | 0.11 |
| 140.583 | 0.00 | 0.04 | 0.132 | O | \| | \| | \| | \| | 0.11 |
| 140.667 | 0.00 | 0.04 | 0.132 | O | \| | \| | \| | \| | 0.11 |
| 140.750 | 0.00 | 0.04 | 0.131 | O | \| | \| | \| | \| | 0.11 |
| 140.833 | 0.00 | 0.04 | 0.131 | O | \| | \| | \| | \| | 0.11 |
| 140.917 | 0.00 | 0.04 | 0.131 | O | \| | \| | \| | \| | 0.11 |
| 141.000 | 0.00 | 0.04 | 0.131 | O | \| | \| | \| | \| | 0.11 |
| 141.083 | 0.00 | 0.04 | 0.130 | O | \| | \| | \| | \| | 0.11 |
| 141.167 | 0.00 | 0.04 | 0.130 | O | \| | \| | \| | \| | 0.11 |
| 141.250 | 0.00 | 0.04 | 0.130 | O | \| | \| | \| | \| | 0.11 |
| 141.333 | 0.00 | 0.04 | 0.130 | O | \| | \| | \| | \| | 0.11 |
| 141.417 | 0.00 | 0.04 | 0.129 | O | \| | \| | \| | \| | 0.11 |
| 141.500 | 0.00 | 0.04 | 0.129 | O | \| | \| | \| | \| | 0.10 |
| 141.583 | 0.00 | 0.04 | 0.129 | O | \| | \| | \| | \| | 0.10 |
| 141.667 | 0.00 | 0.04 | 0.129 | O | \| | \| | \| | \| | 0.10 |
| 141.750 | 0.00 | 0.04 | 0.128 | O | \| | \| | \| | \| | 0.10 |
| 141.833 | 0.00 | 0.04 | 0.128 | O | \| | \| | \| | \| | 0.10 |
| 141.917 | 0.00 | 0.04 | 0.128 | O | \| | \| | \| | \| | 0.10 |
| 142.000 | 0.00 | 0.04 | 0.128 | O | \| | \| | \| | \| | 0.10 |
| 142.083 | 0.00 | 0.04 | 0.128 | O | \| | \| | \| | \| | 0.10 |
| 142.167 | 0.00 | 0.04 | 0.127 | O | \| | \| | \| | \| | 0.10 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 142.250 | 0.00 | 0.04 | 0.127 | O | \| | \| | \| | \| | 0.10 |
| 142.333 | 0.00 | 0.04 | 0.127 | O | \| | \| | \| | \| | 0.10 |
| 142.417 | 0.00 | 0.04 | 0.127 | O | \| | \| | \| | \| | 0.10 |
| 142.500 | 0.00 | 0.04 | 0.126 | O | \| | \| | \| | \| | 0.10 |
| 142.583 | 0.00 | 0.04 | 0.126 | O | \| | \| | \| | \| | 0.10 |
| 142.667 | 0.00 | 0.04 | 0.126 | O | \| | \| | \| | \| | 0.10 |
| 142.750 | 0.00 | 0.04 | 0.126 | O | \| | \| | \| | \| | 0.10 |
| 142.833 | 0.00 | 0.03 | 0.125 | O | \| | \| | \| | \| | 0.10 |
| 142.917 | 0.00 | 0.03 | 0.125 | O | \| | \| | \| | \| | 0.10 |
| 143.000 | 0.00 | 0.03 | 0.125 | O | \| | \| | \| | \| | 0.10 |
| 143.083 | 0.00 | 0.03 | 0.125 | O | \| | \| | \| | \| | 0.10 |
| 143.167 | 0.00 | 0.03 | 0.124 | O | \| | \| | \| | \| | 0.10 |
| 143.250 | 0.00 | 0.03 | 0.124 | O | \| | \| | \| | \| | 0.10 |
| 143.333 | 0.00 | 0.03 | 0.124 | O | \| | \| | \| | \| | 0.10 |
| 143.417 | 0.00 | 0.03 | 0.124 | O | \| | \| | \| | \| | 0.10 |
| 143.500 | 0.00 | 0.03 | 0.123 | O | \| | \| | \| | \| | 0.10 |
| 143.583 | 0.00 | 0.03 | 0.123 | O | \| | \| | \| | \| | 0.10 |
| 143.667 | 0.00 | 0.03 | 0.123 | O | \| | \| | \| | \| | 0.10 |
| 143.750 | 0.00 | 0.03 | 0.123 | O | \| | \| | \| | \| | 0.10 |
| 143.833 | 0.00 | 0.03 | 0.122 | O | \| | \| | \| | \| | 0.10 |
| 143.917 | 0.00 | 0.03 | 0.122 | O | \| | \| | \| | \| | 0.10 |
| 144.000 | 0.00 | 0.03 | 0.122 | O | \| | \| | \| | \| | 0.10 |
| 144.083 | 0.00 | 0.03 | 0.122 | O | \| | \| | \| | \| | 0.10 |
| 144.167 | 0.00 | 0.03 | 0.122 | O | \| | \| | \| | \| | 0.10 |
| 144.250 | 0.00 | 0.03 | 0.121 | O | \| | \| | \| | \| | 0.10 |
| 144.333 | 0.00 | 0.03 | 0.121 | O | \| | \| | \| | \| | 0.10 |
| 144.417 | 0.00 | 0.03 | 0.121 | O | \| | \| | \| | \| | 0.10 |
| 144.500 | 0.00 | 0.03 | 0.121 | O | \| | \| | \| | \| | 0.10 |
| 144.583 | 0.00 | 0.03 | 0.120 | O | \| | \| | \| | \| | 0.10 |
| 144.667 | 0.00 | 0.03 | 0.120 | O | \| | \| | \| | \| | 0.10 |
| 144.750 | 0.00 | 0.03 | 0.120 | O | \| | \| | \| | \| | 0.10 |
| 144.833 | 0.00 | 0.03 | 0.120 | O | \| | \| | \| | \| | 0.10 |
| 144.917 | 0.00 | 0.03 | 0.119 | O | \| | \| | \| | \| | 0.10 |
| 145.000 | 0.00 | 0.03 | 0.119 | O | \| | \| | \| | \| | 0.10 |
| 145.083 | 0.00 | 0.03 | 0.119 | O | \| | \| | \| | \| | 0.10 |
| 145.167 | 0.00 | 0.03 | 0.119 | O | \| | \| | \| | \| | 0.10 |
| 145.250 | 0.00 | 0.03 | 0.119 | O | \| | \| | \| | \| | 0.10 |
| 145.333 | 0.00 | 0.03 | 0.118 | O | \| | \| | \| | \| | 0.10 |
| 145.417 | 0.00 | 0.03 | 0.118 | O | \| | \| | \| | \| | 0.10 |
| 145.500 | 0.00 | 0.03 | 0.118 | O | \| | \| | \| | \| | 0.10 |
| 145.583 | 0.00 | 0.03 | 0.118 | O | \| | \| | \| | \| | 0.10 |
| 145.667 | 0.00 | 0.03 | 0.117 | O | \| | \| | \| | \| | 0.10 |
| 145.750 | 0.00 | 0.03 | 0.117 | O | \| | \| | \| | \| | 0.10 |
| 145.833 | 0.00 | 0.03 | 0.117 | O | \| | \| | \| | \| | 0.09 |
| 145.917 | 0.00 | 0.03 | 0.117 | O | \| | \| | \| | \| | 0.09 |
| 146.000 | 0.00 | 0.03 | 0.116 | O | \| | \| | \| | \| | 0.09 |
| 146.083 | 0.00 | 0.03 | 0.116 | O | \| | \| | \| | \| | 0.09 |
| 146.167 | 0.00 | 0.03 | 0.116 | O | \| | \| | \| | \| | 0.09 |
| 146.250 | 0.00 | 0.03 | 0.116 | O | \| | \| | \| | \| | 0.09 |
| 146.333 | 0.00 | 0.03 | 0.116 | O | \| | \| | \| | \| | 0.09 |
| 146.417 | 0.00 | 0.03 | 0.115 | O | \| | \| | \| | \| | 0.09 |
| 146.500 | 0.00 | 0.03 | 0.115 | O | \| | \| | \| | \| | 0.09 |
| 146.583 | 0.00 | 0.03 | 0.115 | O | \| | \| | \| | \| | 0.09 |
| 146.667 | 0.00 | 0.03 | 0.115 | O | \| | \| | \| | \| | 0.09 |
| 146.750 | 0.00 | 0.03 | 0.114 | O | \| | \| | \| | \| | 0.09 |
| 146.833 | 0.00 | 0.03 | 0.114 | O | \| | \| | \| | \| | 0.09 |
| 146.917 | 0.00 | 0.03 | 0.114 | O | \| | \| | \| | \| | 0.09 |
| 147.000 | 0.00 | 0.03 | 0.114 | O | \| | \| | \| | \| | 0.09 |
| 147.083 | 0.00 | 0.03 | 0.114 | O | \| | \| | \| | \| | 0.09 |
| 147.167 | 0.00 | 0.03 | 0.113 | O | \| | \| | \| | \| | 0.09 |
| 147.250 | 0.00 | 0.03 | 0.113 | O | \| | \| | \| | \| | 0.09 |
| 147.333 | 0.00 | 0.03 | 0.113 | O | \| | \| | \| | \| | 0.09 |
| 147.417 | 0.00 | 0.03 | 0.113 | O | \| | \| | \| | \| | 0.09 |
| 147.500 | 0.00 | 0.03 | 0.113 | O | \| | \| | \| | \| | 0.09 |
| 147.583 | 0.00 | 0.03 | 0.112 | O | \| | \| | \| | \| | 0.09 |
| 147.667 | 0.00 | 0.03 | 0.112 | O | \| | \| | \| | \| | 0.09 |
| 147.750 | 0.00 | 0.03 | 0.112 | O | \| | \| | \| | \| | 0.09 |
| 147.833 | 0.00 | 0.03 | 0.112 | O | \| | \| | \| | \| | 0.09 |
| 147.917 | 0.00 | 0.03 | 0.111 | O | \| | \| | \| | \| | 0.09 |
| 148.000 | 0.00 | 0.03 | 0.111 | O | \| | \| | \| | \| | 0.09 |
| 148.083 | 0.00 | 0.03 | 0.111 | O | \| | \| | \| | \| | 0.09 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 148.167 | 0.00 | 0.03 | 0.111 | O | \| | \| | \| | \| | 0.09 |
| 148.250 | 0.00 | 0.03 | 0.111 | O | \| | \| | \| | \| | 0.09 |
| 148.333 | 0.00 | 0.03 | 0.110 | O | \| | \| | \| | \| | 0.09 |
| 148.417 | 0.00 | 0.03 | 0.110 | O | \| | \| | \| | \| | 0.09 |
| 148.500 | 0.00 | 0.03 | 0.110 | O | \| | \| | \| | \| | 0.09 |
| 148.583 | 0.00 | 0.03 | 0.110 | O | \| | \| | \| | \| | 0.09 |
| 148.667 | 0.00 | 0.03 | 0.110 | O | \| | \| | \| | \| | 0.09 |
| 148.750 | 0.00 | 0.03 | 0.109 | O | \| | \| | \| | \| | 0.09 |
| 148.833 | 0.00 | 0.03 | 0.109 | O | \| | \| | \| | \| | 0.09 |
| 148.917 | 0.00 | 0.03 | 0.109 | O | \| | \| | \| | \| | 0.09 |
| 149.000 | 0.00 | 0.03 | 0.109 | O | \| | \| | \| | \| | 0.09 |
| 149.083 | 0.00 | 0.03 | 0.108 | O | \| | \| | \| | \| | 0.09 |
| 149.167 | 0.00 | 0.03 | 0.108 | O | \| | \| | \| | \| | 0.09 |
| 149.250 | 0.00 | 0.03 | 0.108 | O | \| | \| | \| | \| | 0.09 |
| 149.333 | 0.00 | 0.03 | 0.108 | O | \| | \| | \| | \| | 0.09 |
| 149.417 | 0.00 | 0.03 | 0.108 | O | \| | \| | \| | \| | 0.09 |
| 149.500 | 0.00 | 0.03 | 0.107 | O | \| | \| | \| | \| | 0.09 |
| 149.583 | 0.00 | 0.03 | 0.107 | O | \| | \| | \| | \| | 0.09 |
| 149.667 | 0.00 | 0.03 | 0.107 | O | \| | \| | \| | \| | 0.09 |
| 149.750 | 0.00 | 0.03 | 0.107 | O | \| | \| | \| | \| | 0.09 |
| 149.833 | 0.00 | 0.03 | 0.107 | O | \| | \| | \| | \| | 0.09 |
| 149.917 | 0.00 | 0.03 | 0.106 | O | \| | \| | \| | \| | 0.09 |
| 150.000 | 0.00 | 0.03 | 0.106 | O | \| | \| | \| | \| | 0.09 |
| 150.083 | 0.00 | 0.03 | 0.106 | O | \| | \| | \| | \| | 0.09 |
| 150.167 | 0.00 | 0.03 | 0.106 | O | \| | \| | \| | \| | 0.09 |
| 150.250 | 0.00 | 0.03 | 0.106 | O | \| | \| | \| | \| | 0.09 |
| 150.333 | 0.00 | 0.03 | 0.105 | O | \| | \| | \| | \| | 0.09 |
| 150.417 | 0.00 | 0.03 | 0.105 | O | \| | \| | \| | \| | 0.09 |
| 150.500 | 0.00 | 0.03 | 0.105 | O | \| | \| | \| | \| | 0.09 |
| 150.583 | 0.00 | 0.03 | 0.105 | O | \| | \| | \| | \| | 0.09 |
| 150.667 | 0.00 | 0.03 | 0.105 | O | \| | \| | \| | \| | 0.08 |
| 150.750 | 0.00 | 0.03 | 0.104 | O | \| | \| | \| | \| | 0.08 |
| 150.833 | 0.00 | 0.03 | 0.104 | O | \| | \| | \| | \| | 0.08 |
| 150.917 | 0.00 | 0.03 | 0.104 | O | \| | \| | \| | \| | 0.08 |
| 151.000 | 0.00 | 0.03 | 0.104 | O | \| | \| | \| | \| | 0.08 |
| 151.083 | 0.00 | 0.03 | 0.104 | O | \| | \| | \| | \| | 0.08 |
| 151.167 | 0.00 | 0.03 | 0.103 | O | \| | \| | \| | \| | 0.08 |
| 151.250 | 0.00 | 0.03 | 0.103 | O | \| | \| | \| | \| | 0.08 |
| 151.333 | 0.00 | 0.03 | 0.103 | O | \| | \| | \| | \| | 0.08 |
| 151.417 | 0.00 | 0.03 | 0.103 | O | \| | \| | \| | \| | 0.08 |
| 151.500 | 0.00 | 0.03 | 0.103 | O | \| | \| | \| | \| | 0.08 |
| 151.583 | 0.00 | 0.03 | 0.102 | O | \| | \| | \| | \| | 0.08 |
| 151.667 | 0.00 | 0.03 | 0.102 | O | \| | \| | \| | \| | 0.08 |
| 151.750 | 0.00 | 0.03 | 0.102 | O | \| | \| | \| | \| | 0.08 |
| 151.833 | 0.00 | 0.03 | 0.102 | O | \| | \| | \| | \| | 0.08 |
| 151.917 | 0.00 | 0.03 | 0.102 | O | \| | \| | \| | \| | 0.08 |
| 152.000 | 0.00 | 0.03 | 0.101 | O | \| | \| | \| | \| | 0.08 |
| 152.083 | 0.00 | 0.03 | 0.101 | O | \| | \| | \| | \| | 0.08 |
| 152.167 | 0.00 | 0.03 | 0.101 | O | \| | \| | \| | \| | 0.08 |
| 152.250 | 0.00 | 0.03 | 0.101 | O | \| | \| | \| | \| | 0.08 |
| 152.333 | 0.00 | 0.03 | 0.101 | O | \| | \| | \| | \| | 0.08 |
| 152.417 | 0.00 | 0.03 | 0.100 | O | \| | \| | \| | \| | 0.08 |
| 152.500 | 0.00 | 0.03 | 0.100 | O | \| | \| | \| | \| | 0.08 |
| 152.583 | 0.00 | 0.03 | 0.100 | O | \| | \| | \| | \| | 0.08 |
| 152.667 | 0.00 | 0.03 | 0.100 | O | \| | \| | \| | \| | 0.08 |
| 152.750 | 0.00 | 0.03 | 0.100 | O | \| | \| | \| | \| | 0.08 |
| 152.833 | 0.00 | 0.03 | 0.100 | O | \| | \| | \| | \| | 0.08 |
| 152.917 | 0.00 | 0.03 | 0.099 | O | \| | \| | \| | \| | 0.08 |
| 153.000 | 0.00 | 0.03 | 0.099 | O | \| | \| | \| | \| | 0.08 |
| 153.083 | 0.00 | 0.03 | 0.099 | O | \| | \| | \| | \| | 0.08 |
| 153.167 | 0.00 | 0.03 | 0.099 | O | \| | \| | \| | \| | 0.08 |
| 153.250 | 0.00 | 0.03 | 0.099 | O | \| | \| | \| | \| | 0.08 |
| 153.333 | 0.00 | 0.03 | 0.098 | O | \| | \| | \| | \| | 0.08 |
| 153.417 | 0.00 | 0.03 | 0.098 | O | \| | \| | \| | \| | 0.08 |
| 153.500 | 0.00 | 0.03 | 0.098 | O | \| | \| | \| | \| | 0.08 |
| 153.583 | 0.00 | 0.03 | 0.098 | O | \| | \| | \| | \| | 0.08 |
| 153.667 | 0.00 | 0.03 | 0.098 | O | \| | \| | \| | \| | 0.08 |
| 153.750 | 0.00 | 0.03 | 0.097 | O | \| | \| | \| | \| | 0.08 |
| 153.833 | 0.00 | 0.03 | 0.097 | O | \| | \| | \| | \| | 0.08 |
| 153.917 | 0.00 | 0.03 | 0.097 | O | \| | \| | \| | \| | 0.08 |
| 154.000 | 0.00 | 0.03 | 0.097 | O | \| | \| | \| | \| | 0.08 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 154.083 | 0.00 | 0.03 | 0.097 | O | \| | \| | \| | \| | 0.08 |
| 154.167 | 0.00 | 0.03 | 0.096 | O | \| | \| | \| | \| | 0.08 |
| 154.250 | 0.00 | 0.03 | 0.096 | O | \| | \| | \| | \| | 0.08 |
| 154.333 | 0.00 | 0.03 | 0.096 | O | \| | \| | \| | \| | 0.08 |
| 154.417 | 0.00 | 0.03 | 0.096 | O | \| | \| | \| | \| | 0.08 |
| 154.500 | 0.00 | 0.03 | 0.096 | O | \| | \| | \| | \| | 0.08 |
| 154.583 | 0.00 | 0.03 | 0.096 | O | \| | \| | \| | \| | 0.08 |
| 154.667 | 0.00 | 0.03 | 0.095 | O | \| | \| | \| | \| | 0.08 |
| 154.750 | 0.00 | 0.03 | 0.095 | O | \| | \| | \| | \| | 0.08 |
| 154.833 | 0.00 | 0.03 | 0.095 | O | \| | \| | \| | \| | 0.08 |
| 154.917 | 0.00 | 0.03 | 0.095 | O | \| | \| | \| | \| | 0.08 |
| 155.000 | 0.00 | 0.03 | 0.095 | O | \| | \| | \| | \| | 0.08 |
| 155.083 | 0.00 | 0.03 | 0.094 | O | \| | \| | \| | \| | 0.08 |
| 155.167 | 0.00 | 0.03 | 0.094 | O | \| | \| | \| | \| | 0.08 |
| 155.250 | 0.00 | 0.03 | 0.094 | O | \| | \| | \| | \| | 0.08 |
| 155.333 | 0.00 | 0.03 | 0.094 | O | \| | \| | \| | \| | 0.08 |
| 155.417 | 0.00 | 0.03 | 0.094 | O | \| | \| | \| | \| | 0.08 |
| 155.500 | 0.00 | 0.03 | 0.094 | O | \| | \| | \| | \| | 0.08 |
| 155.583 | 0.00 | 0.03 | 0.093 | O | \| | \| | \| | \| | 0.08 |
| 155.667 | 0.00 | 0.03 | 0.093 | O | \| | \| | \| | \| | 0.08 |
| 155.750 | 0.00 | 0.03 | 0.093 | O | \| | \| | \| | \| | 0.08 |
| 155.833 | 0.00 | 0.03 | 0.093 | O | \| | \| | \| | \| | 0.08 |
| 155.917 | 0.00 | 0.03 | 0.093 | O | \| | \| | \| | \| | 0.08 |
| 156.000 | 0.00 | 0.03 | 0.092 | O | \| | \| | \| | \| | 0.08 |
| 156.083 | 0.00 | 0.03 | 0.092 | O | \| | \| | \| | \| | 0.07 |
| 156.167 | 0.00 | 0.03 | 0.092 | O | \| | \| | \| | \| | 0.07 |
| 156.250 | 0.00 | 0.03 | 0.092 | O | \| | \| | \| | \| | 0.07 |
| 156.333 | 0.00 | 0.03 | 0.092 | O | \| | \| | \| | \| | 0.07 |
| 156.417 | 0.00 | 0.03 | 0.092 | O | \| | \| | \| | \| | 0.07 |
| 156.500 | 0.00 | 0.03 | 0.091 | O | \| | \| | \| | \| | 0.07 |
| 156.583 | 0.00 | 0.03 | 0.091 | O | \| | \| | \| | \| | 0.07 |
| 156.667 | 0.00 | 0.03 | 0.091 | O | \| | \| | \| | \| | 0.07 |
| 156.750 | 0.00 | 0.03 | 0.091 | O | \| | \| | \| | \| | 0.07 |
| 156.833 | 0.00 | 0.03 | 0.091 | O | \| | \| | \| | \| | 0.07 |
| 156.917 | 0.00 | 0.03 | 0.091 | O | \| | \| | \| | \| | 0.07 |
| 157.000 | 0.00 | 0.03 | 0.090 | O | \| | \| | \| | \| | 0.07 |
| 157.083 | 0.00 | 0.03 | 0.090 | O | \| | \| | \| | \| | 0.07 |
| 157.167 | 0.00 | 0.03 | 0.090 | O | \| | \| | \| | \| | 0.07 |
| 157.250 | 0.00 | 0.03 | 0.090 | O | \| | \| | \| | \| | 0.07 |
| 157.333 | 0.00 | 0.03 | 0.090 | O | \| | \| | \| | \| | 0.07 |
| 157.417 | 0.00 | 0.02 | 0.090 | O | \| | \| | \| | \| | 0.07 |
| 157.500 | 0.00 | 0.02 | 0.089 | O | \| | \| | \| | \| | 0.07 |
| 157.583 | 0.00 | 0.02 | 0.089 | O | \| | \| | \| | \| | 0.07 |
| 157.667 | 0.00 | 0.02 | 0.089 | O | \| | \| | \| | \| | 0.07 |
| 157.750 | 0.00 | 0.02 | 0.089 | O | \| | \| | \| | \| | 0.07 |
| 157.833 | 0.00 | 0.02 | 0.089 | O | \| | \| | \| | \| | 0.07 |
| 157.917 | 0.00 | 0.02 | 0.088 | O | \| | \| | \| | \| | 0.07 |
| 158.000 | 0.00 | 0.02 | 0.088 | O | \| | \| | \| | \| | 0.07 |
| 158.083 | 0.00 | 0.02 | 0.088 | O | \| | \| | \| | \| | 0.07 |
| 158.167 | 0.00 | 0.02 | 0.088 | O | \| | \| | \| | \| | 0.07 |
| 158.250 | 0.00 | 0.02 | 0.088 | O | \| | \| | \| | \| | 0.07 |
| 158.333 | 0.00 | 0.02 | 0.088 | O | \| | \| | \| | \| | 0.07 |
| 158.417 | 0.00 | 0.02 | 0.087 | O | \| | \| | \| | \| | 0.07 |
| 158.500 | 0.00 | 0.02 | 0.087 | O | \| | \| | \| | \| | 0.07 |
| 158.583 | 0.00 | 0.02 | 0.087 | O | \| | \| | \| | \| | 0.07 |
| 158.667 | 0.00 | 0.02 | 0.087 | O | \| | \| | \| | \| | 0.07 |
| 158.750 | 0.00 | 0.02 | 0.087 | O | \| | \| | \| | \| | 0.07 |
| 158.833 | 0.00 | 0.02 | 0.087 | O | \| | \| | \| | \| | 0.07 |
| 158.917 | 0.00 | 0.02 | 0.086 | O | \| | \| | \| | \| | 0.07 |
| 159.000 | 0.00 | 0.02 | 0.086 | O | \| | \| | \| | \| | 0.07 |
| 159.083 | 0.00 | 0.02 | 0.086 | O | \| | \| | \| | \| | 0.07 |
| 159.167 | 0.00 | 0.02 | 0.086 | O | \| | \| | \| | \| | 0.07 |
| 159.250 | 0.00 | 0.02 | 0.086 | O | \| | \| | \| | \| | 0.07 |
| 159.333 | 0.00 | 0.02 | 0.086 | O | \| | \| | \| | \| | 0.07 |
| 159.417 | 0.00 | 0.02 | 0.085 | O | \| | \| | \| | \| | 0.07 |
| 159.500 | 0.00 | 0.02 | 0.085 | O | \| | \| | \| | \| | 0.07 |
| 159.583 | 0.00 | 0.02 | 0.085 | O | \| | \| | \| | \| | 0.07 |
| 159.667 | 0.00 | 0.02 | 0.085 | O | \| | \| | \| | \| | 0.07 |
| 159.750 | 0.00 | 0.02 | 0.085 | O | \| | \| | \| | \| | 0.07 |
| 159.833 | 0.00 | 0.02 | 0.085 | O | \| | \| | \| | \| | 0.07 |
| 159.917 | 0.00 | 0.02 | 0.084 | O | \| | \| | \| | \| | 0.07 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 160.000 | 0.00 | 0.02 | 0.084 | O | \| | \| | \| | \| | 0.07 |
| 160.083 | 0.00 | 0.02 | 0.084 | O | \| | \| | \| | \| | 0.07 |
| 160.167 | 0.00 | 0.02 | 0.084 | O | \| | \| | \| | \| | 0.07 |
| 160.250 | 0.00 | 0.02 | 0.084 | O | \| | \| | \| | \| | 0.07 |
| 160.333 | 0.00 | 0.02 | 0.084 | O | \| | \| | \| | \| | 0.07 |
| 160.417 | 0.00 | 0.02 | 0.084 | O | \| | \| | \| | \| | 0.07 |
| 160.500 | 0.00 | 0.02 | 0.083 | O | \| | \| | \| | \| | 0.07 |
| 160.583 | 0.00 | 0.02 | 0.083 | O | \| | \| | \| | \| | 0.07 |
| 160.667 | 0.00 | 0.02 | 0.083 | O | \| | \| | \| | \| | 0.07 |
| 160.750 | 0.00 | 0.02 | 0.083 | O | \| | \| | \| | \| | 0.07 |
| 160.833 | 0.00 | 0.02 | 0.083 | O | \| | \| | \| | \| | 0.07 |
| 160.917 | 0.00 | 0.02 | 0.083 | O | \| | \| | \| | \| | 0.07 |
| 161.000 | 0.00 | 0.02 | 0.082 | O | \| | \| | \| | \| | 0.07 |
| 161.083 | 0.00 | 0.02 | 0.082 | O | \| | \| | \| | \| | 0.07 |
| 161.167 | 0.00 | 0.02 | 0.082 | O | \| | \| | \| | \| | 0.07 |
| 161.250 | 0.00 | 0.02 | 0.082 | O | \| | \| | \| | \| | 0.07 |
| 161.333 | 0.00 | 0.02 | 0.082 | O | \| | \| | \| | \| | 0.07 |
| 161.417 | 0.00 | 0.02 | 0.082 | O | \| | \| | \| | \| | 0.07 |
| 161.500 | 0.00 | 0.02 | 0.081 | O | \| | \| | \| | \| | 0.07 |
| 161.583 | 0.00 | 0.02 | 0.081 | O | \| | \| | \| | \| | 0.07 |
| 161.667 | 0.00 | 0.02 | 0.081 | O | \| | \| | \| | \| | 0.07 |
| 161.750 | 0.00 | 0.02 | 0.081 | O | \| | \| | \| | \| | 0.07 |
| 161.833 | 0.00 | 0.02 | 0.081 | O | \| | \| | \| | \| | 0.07 |
| 161.917 | 0.00 | 0.02 | 0.081 | O | \| | \| | \| | \| | 0.07 |
| 162.000 | 0.00 | 0.02 | 0.081 | O | \| | \| | \| | \| | 0.07 |
| 162.083 | 0.00 | 0.02 | 0.080 | O | \| | \| | \| | \| | 0.07 |
| 162.167 | 0.00 | 0.02 | 0.080 | O | \| | \| | \| | \| | 0.07 |
| 162.250 | 0.00 | 0.02 | 0.080 | O | \| | \| | \| | \| | 0.06 |
| 162.333 | 0.00 | 0.02 | 0.080 | O | \| | \| | \| | \| | 0.06 |
| 162.417 | 0.00 | 0.02 | 0.080 | O | \| | \| | \| | \| | 0.06 |
| 162.500 | 0.00 | 0.02 | 0.080 | O | \| | \| | \| | \| | 0.06 |
| 162.583 | 0.00 | 0.02 | 0.079 | O | \| | \| | \| | \| | 0.06 |
| 162.667 | 0.00 | 0.02 | 0.079 | O | \| | \| | \| | \| | 0.06 |
| 162.750 | 0.00 | 0.02 | 0.079 | O | \| | \| | \| | \| | 0.06 |
| 162.833 | 0.00 | 0.02 | 0.079 | O | \| | \| | \| | \| | 0.06 |
| 162.917 | 0.00 | 0.02 | 0.079 | O | \| | \| | \| | \| | 0.06 |
| 163.000 | 0.00 | 0.02 | 0.079 | O | \| | \| | \| | \| | 0.06 |
| 163.083 | 0.00 | 0.02 | 0.079 | O | \| | \| | \| | \| | 0.06 |
| 163.167 | 0.00 | 0.02 | 0.078 | O | \| | \| | \| | \| | 0.06 |
| 163.250 | 0.00 | 0.02 | 0.078 | O | \| | \| | \| | \| | 0.06 |
| 163.333 | 0.00 | 0.02 | 0.078 | O | \| | \| | \| | \| | 0.06 |
| 163.417 | 0.00 | 0.02 | 0.078 | O | \| | \| | \| | \| | 0.06 |
| 163.500 | 0.00 | 0.02 | 0.078 | O | \| | \| | \| | \| | 0.06 |
| 163.583 | 0.00 | 0.02 | 0.078 | O | \| | \| | \| | \| | 0.06 |
| 163.667 | 0.00 | 0.02 | 0.077 | O | \| | \| | \| | \| | 0.06 |
| 163.750 | 0.00 | 0.02 | 0.077 | O | \| | \| | \| | \| | 0.06 |
| 163.833 | 0.00 | 0.02 | 0.077 | O | \| | \| | \| | \| | 0.06 |
| 163.917 | 0.00 | 0.02 | 0.077 | O | \| | \| | \| | \| | 0.06 |
| 164.000 | 0.00 | 0.02 | 0.077 | O | \| | \| | \| | \| | 0.06 |
| 164.083 | 0.00 | 0.02 | 0.077 | O | \| | \| | \| | \| | 0.06 |
| 164.167 | 0.00 | 0.02 | 0.077 | O | \| | \| | \| | \| | 0.06 |
| 164.250 | 0.00 | 0.02 | 0.076 | O | \| | \| | \| | \| | 0.06 |
| 164.333 | 0.00 | 0.02 | 0.076 | O | \| | \| | \| | \| | 0.06 |
| 164.417 | 0.00 | 0.02 | 0.076 | O | \| | \| | \| | \| | 0.06 |
| 164.500 | 0.00 | 0.02 | 0.076 | O | \| | \| | \| | \| | 0.06 |
| 164.583 | 0.00 | 0.02 | 0.076 | O | \| | \| | \| | \| | 0.06 |
| 164.667 | 0.00 | 0.02 | 0.076 | O | \| | \| | \| | \| | 0.06 |
| 164.750 | 0.00 | 0.02 | 0.076 | O | \| | \| | \| | \| | 0.06 |
| 164.833 | 0.00 | 0.02 | 0.075 | O | \| | \| | \| | \| | 0.06 |
| 164.917 | 0.00 | 0.02 | 0.075 | O | \| | \| | \| | \| | 0.06 |
| 165.000 | 0.00 | 0.02 | 0.075 | O | \| | \| | \| | \| | 0.06 |
| 165.083 | 0.00 | 0.02 | 0.075 | O | \| | \| | \| | \| | 0.06 |
| 165.167 | 0.00 | 0.02 | 0.075 | O | \| | \| | \| | \| | 0.06 |
| 165.250 | 0.00 | 0.02 | 0.075 | O | \| | \| | \| | \| | 0.06 |
| 165.333 | 0.00 | 0.02 | 0.075 | O | \| | \| | \| | \| | 0.06 |
| 165.417 | 0.00 | 0.02 | 0.074 | O | \| | \| | \| | \| | 0.06 |
| 165.500 | 0.00 | 0.02 | 0.074 | O | \| | \| | \| | \| | 0.06 |
| 165.583 | 0.00 | 0.02 | 0.074 | O | \| | \| | \| | \| | 0.06 |
| 165.667 | 0.00 | 0.02 | 0.074 | O | \| | \| | \| | \| | 0.06 |
| 165.750 | 0.00 | 0.02 | 0.074 | O | \| | \| | \| | \| | 0.06 |
| 165.833 | 0.00 | 0.02 | 0.074 | O | \| | \| | \| | \| | 0.06 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 165.917 | 0.00 | 0.02 | 0.074 | O | \| | \| | \| | \| | 0.06 |
| 166.000 | 0.00 | 0.02 | 0.073 | O | \| | \| | \| | \| | 0.06 |
| 166.083 | 0.00 | 0.02 | 0.073 | O | \| | \| | \| | \| | 0.06 |
| 166.167 | 0.00 | 0.02 | 0.073 | O | \| | \| | \| | \| | 0.06 |
| 166.250 | 0.00 | 0.02 | 0.073 | O | \| | \| | \| | \| | 0.06 |
| 166.333 | 0.00 | 0.02 | 0.073 | O | \| | \| | \| | \| | 0.06 |
| 166.417 | 0.00 | 0.02 | 0.073 | O | \| | \| | \| | \| | 0.06 |
| 166.500 | 0.00 | 0.02 | 0.073 | O | \| | \| | \| | \| | 0.06 |
| 166.583 | 0.00 | 0.02 | 0.072 | O | \| | \| | \| | \| | 0.06 |
| 166.667 | 0.00 | 0.02 | 0.072 | O | \| | \| | \| | \| | 0.06 |
| 166.750 | 0.00 | 0.02 | 0.072 | O | \| | \| | \| | \| | 0.06 |
| 166.833 | 0.00 | 0.02 | 0.072 | O | \| | \| | \| | \| | 0.06 |
| 166.917 | 0.00 | 0.02 | 0.072 | O | \| | \| | \| | \| | 0.06 |
| 167.000 | 0.00 | 0.02 | 0.072 | O | \| | \| | \| | \| | 0.06 |
| 167.083 | 0.00 | 0.02 | 0.072 | O | \| | \| | \| | \| | 0.06 |
| 167.167 | 0.00 | 0.02 | 0.071 | O | \| | \| | \| | \| | 0.06 |
| 167.250 | 0.00 | 0.02 | 0.071 | O | \| | \| | \| | \| | 0.06 |
| 167.333 | 0.00 | 0.02 | 0.071 | O | \| | \| | \| | \| | 0.06 |
| 167.417 | 0.00 | 0.02 | 0.071 | O | \| | \| | \| | \| | 0.06 |
| 167.500 | 0.00 | 0.02 | 0.071 | O | \| | \| | \| | \| | 0.06 |
| 167.583 | 0.00 | 0.02 | 0.071 | O | \| | \| | \| | \| | 0.06 |
| 167.667 | 0.00 | 0.02 | 0.071 | O | \| | \| | \| | \| | 0.06 |
| 167.750 | 0.00 | 0.02 | 0.071 | O | \| | \| | \| | \| | 0.06 |
| 167.833 | 0.00 | 0.02 | 0.070 | O | \| | \| | \| | \| | 0.06 |
| 167.917 | 0.00 | 0.02 | 0.070 | O | \| | \| | \| | \| | 0.06 |
| 168.000 | 0.00 | 0.02 | 0.070 | O | \| | \| | \| | \| | 0.06 |
| 168.083 | 0.00 | 0.02 | 0.070 | O | \| | \| | \| | \| | 0.06 |
| 168.167 | 0.00 | 0.02 | 0.070 | O | \| | \| | \| | \| | 0.06 |
| 168.250 | 0.00 | 0.02 | 0.070 | O | \| | \| | \| | \| | 0.06 |
| 168.333 | 0.00 | 0.02 | 0.070 | O | \| | \| | \| | \| | 0.06 |
| 168.417 | 0.00 | 0.02 | 0.069 | O | \| | \| | \| | \| | 0.06 |
| 168.500 | 0.00 | 0.02 | 0.069 | O | \| | \| | \| | \| | 0.06 |
| 168.583 | 0.00 | 0.02 | 0.069 | O | \| | \| | \| | \| | 0.06 |
| 168.667 | 0.00 | 0.02 | 0.069 | O | \| | \| | \| | \| | 0.06 |
| 168.750 | 0.00 | 0.02 | 0.069 | O | \| | \| | \| | \| | 0.06 |
| 168.833 | 0.00 | 0.02 | 0.069 | O | \| | \| | \| | \| | 0.06 |
| 168.917 | 0.00 | 0.02 | 0.069 | O | \| | \| | \| | \| | 0.06 |
| 169.000 | 0.00 | 0.02 | 0.069 | O | \| | \| | \| | \| | 0.06 |
| 169.083 | 0.00 | 0.02 | 0.068 | O | \| | \| | \| | \| | 0.06 |
| 169.167 | 0.00 | 0.02 | 0.068 | O | \| | \| | \| | \| | 0.06 |
| 169.250 | 0.00 | 0.02 | 0.068 | O | \| | \| | \| | \| | 0.06 |
| 169.333 | 0.00 | 0.02 | 0.068 | O | \| | \| | \| | \| | 0.06 |
| 169.417 | 0.00 | 0.02 | 0.068 | O | \| | \| | \| | \| | 0.06 |
| 169.500 | 0.00 | 0.02 | 0.068 | O | \| | \| | \| | \| | 0.05 |
| 169.583 | 0.00 | 0.02 | 0.068 | O | \| | \| | \| | \| | 0.05 |
| 169.667 | 0.00 | 0.02 | 0.067 | O | \| | \| | \| | \| | 0.05 |
| 169.750 | 0.00 | 0.02 | 0.067 | O | \| | \| | \| | \| | 0.05 |
| 169.833 | 0.00 | 0.02 | 0.067 | O | \| | \| | \| | \| | 0.05 |
| 169.917 | 0.00 | 0.02 | 0.067 | O | \| | \| | \| | \| | 0.05 |
| 170.000 | 0.00 | 0.02 | 0.067 | O | \| | \| | \| | \| | 0.05 |
| 170.083 | 0.00 | 0.02 | 0.067 | O | \| | \| | \| | \| | 0.05 |
| 170.167 | 0.00 | 0.02 | 0.067 | O | \| | \| | \| | \| | 0.05 |
| 170.250 | 0.00 | 0.02 | 0.067 | O | \| | \| | \| | \| | 0.05 |
| 170.333 | 0.00 | 0.02 | 0.066 | O | \| | \| | \| | \| | 0.05 |
| 170.417 | 0.00 | 0.02 | 0.066 | O | \| | \| | \| | \| | 0.05 |
| 170.500 | 0.00 | 0.02 | 0.066 | O | \| | \| | \| | \| | 0.05 |
| 170.583 | 0.00 | 0.02 | 0.066 | O | \| | \| | \| | \| | 0.05 |
| 170.667 | 0.00 | 0.02 | 0.066 | O | \| | \| | \| | \| | 0.05 |
| 170.750 | 0.00 | 0.02 | 0.066 | O | \| | \| | \| | \| | 0.05 |
| 170.833 | 0.00 | 0.02 | 0.066 | O | \| | \| | \| | \| | 0.05 |
| 170.917 | 0.00 | 0.02 | 0.066 | O | \| | \| | \| | \| | 0.05 |
| 171.000 | 0.00 | 0.02 | 0.065 | O | \| | \| | \| | \| | 0.05 |
| 171.083 | 0.00 | 0.02 | 0.065 | O | \| | \| | \| | \| | 0.05 |
| 171.167 | 0.00 | 0.02 | 0.065 | O | \| | \| | \| | \| | 0.05 |
| 171.250 | 0.00 | 0.02 | 0.065 | O | \| | \| | \| | \| | 0.05 |
| 171.333 | 0.00 | 0.02 | 0.065 | O | \| | \| | \| | \| | 0.05 |
| 171.417 | 0.00 | 0.02 | 0.065 | O | \| | \| | \| | \| | 0.05 |
| 171.500 | 0.00 | 0.02 | 0.065 | O | \| | \| | \| | \| | 0.05 |
| 171.583 | 0.00 | 0.02 | 0.065 | O | \| | \| | \| | \| | 0.05 |
| 171.667 | 0.00 | 0.02 | 0.064 | O | \| | \| | \| | \| | 0.05 |
| 171.750 | 0.00 | 0.02 | 0.064 | O | \| | \| | \| | \| | 0.05 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 171.833 | 0.00 | 0.02 | 0.064 | O | \| | \| | \| | \| | 0.05 |
| 171.917 | 0.00 | 0.02 | 0.064 | O | \| | \| | \| | \| | 0.05 |
| 172.000 | 0.00 | 0.02 | 0.064 | O | \| | \| | \| | \| | 0.05 |
| 172.083 | 0.00 | 0.02 | 0.064 | O | \| | \| | \| | \| | 0.05 |
| 172.167 | 0.00 | 0.02 | 0.064 | O | \| | \| | \| | \| | 0.05 |
| 172.250 | 0.00 | 0.02 | 0.064 | O | \| | \| | \| | \| | 0.05 |
| 172.333 | 0.00 | 0.02 | 0.063 | O | \| | \| | \| | \| | 0.05 |
| 172.417 | 0.00 | 0.02 | 0.063 | O | \| | \| | \| | \| | 0.05 |
| 172.500 | 0.00 | 0.02 | 0.063 | O | \| | \| | \| | \| | 0.05 |
| 172.583 | 0.00 | 0.02 | 0.063 | O | \| | \| | \| | \| | 0.05 |
| 172.667 | 0.00 | 0.02 | 0.063 | O | \| | \| | \| | \| | 0.05 |
| 172.750 | 0.00 | 0.02 | 0.063 | O | \| | \| | \| | \| | 0.05 |
| 172.833 | 0.00 | 0.02 | 0.063 | O | \| | \| | \| | \| | 0.05 |
| 172.917 | 0.00 | 0.02 | 0.063 | O | \| | \| | \| | \| | 0.05 |
| 173.000 | 0.00 | 0.02 | 0.062 | O | \| | \| | \| | \| | 0.05 |
| 173.083 | 0.00 | 0.02 | 0.062 | O | \| | \| | \| | \| | 0.05 |
| 173.167 | 0.00 | 0.02 | 0.062 | O | \| | \| | \| | \| | 0.05 |
| 173.250 | 0.00 | 0.02 | 0.062 | O | \| | \| | \| | \| | 0.05 |
| 173.333 | 0.00 | 0.02 | 0.062 | O | \| | \| | \| | \| | 0.05 |
| 173.417 | 0.00 | 0.02 | 0.062 | O | \| | \| | \| | \| | 0.05 |
| 173.500 | 0.00 | 0.02 | 0.062 | O | \| | \| | \| | \| | 0.05 |
| 173.583 | 0.00 | 0.02 | 0.062 | O | \| | \| | \| | \| | 0.05 |
| 173.667 | 0.00 | 0.02 | 0.062 | O | \| | \| | \| | \| | 0.05 |
| 173.750 | 0.00 | 0.02 | 0.061 | O | \| | \| | \| | \| | 0.05 |
| 173.833 | 0.00 | 0.02 | 0.061 | O | \| | \| | \| | \| | 0.05 |
| 173.917 | 0.00 | 0.02 | 0.061 | O | \| | \| | \| | \| | 0.05 |
| 174.000 | 0.00 | 0.02 | 0.061 | O | \| | \| | \| | \| | 0.05 |
| 174.083 | 0.00 | 0.02 | 0.061 | O | \| | \| | \| | \| | 0.05 |
| 174.167 | 0.00 | 0.02 | 0.061 | O | \| | \| | \| | \| | 0.05 |
| 174.250 | 0.00 | 0.02 | 0.061 | O | \| | \| | \| | \| | 0.05 |
| 174.333 | 0.00 | 0.02 | 0.061 | O | \| | \| | \| | \| | 0.05 |
| 174.417 | 0.00 | 0.02 | 0.060 | O | \| | \| | \| | \| | 0.05 |
| 174.500 | 0.00 | 0.02 | 0.060 | O | \| | \| | \| | \| | 0.05 |
| 174.583 | 0.00 | 0.02 | 0.060 | O | \| | \| | \| | \| | 0.05 |
| 174.667 | 0.00 | 0.02 | 0.060 | O | \| | \| | \| | \| | 0.05 |
| 174.750 | 0.00 | 0.02 | 0.060 | O | \| | \| | \| | \| | 0.05 |
| 174.833 | 0.00 | 0.02 | 0.060 | O | \| | \| | \| | \| | 0.05 |
| 174.917 | 0.00 | 0.02 | 0.060 | O | \| | \| | \| | \| | 0.05 |
| 175.000 | 0.00 | 0.02 | 0.060 | O | \| | \| | \| | \| | 0.05 |
| 175.083 | 0.00 | 0.02 | 0.060 | O | \| | \| | \| | \| | 0.05 |
| 175.167 | 0.00 | 0.02 | 0.059 | O | \| | \| | \| | \| | 0.05 |
| 175.250 | 0.00 | 0.02 | 0.059 | O | \| | \| | \| | \| | 0.05 |
| 175.333 | 0.00 | 0.02 | 0.059 | O | \| | \| | \| | \| | 0.05 |
| 175.417 | 0.00 | 0.02 | 0.059 | O | \| | \| | \| | \| | 0.05 |
| 175.500 | 0.00 | 0.02 | 0.059 | O | \| | \| | \| | \| | 0.05 |
| 175.583 | 0.00 | 0.02 | 0.059 | O | \| | \| | \| | \| | 0.05 |
| 175.667 | 0.00 | 0.02 | 0.059 | O | \| | \| | \| | \| | 0.05 |
| 175.750 | 0.00 | 0.02 | 0.059 | O | \| | \| | \| | \| | 0.05 |
| 175.833 | 0.00 | 0.02 | 0.059 | O | \| | \| | \| | \| | 0.05 |
| 175.917 | 0.00 | 0.02 | 0.058 | O | \| | \| | \| | \| | 0.05 |
| 176.000 | 0.00 | 0.02 | 0.058 | O | \| | \| | \| | \| | 0.05 |
| 176.083 | 0.00 | 0.02 | 0.058 | O | \| | \| | \| | \| | 0.05 |
| 176.167 | 0.00 | 0.02 | 0.058 | O | \| | \| | \| | \| | 0.05 |
| 176.250 | 0.00 | 0.02 | 0.058 | O | \| | \| | \| | \| | 0.05 |
| 176.333 | 0.00 | 0.02 | 0.058 | O | \| | \| | \| | \| | 0.05 |
| 176.417 | 0.00 | 0.02 | 0.058 | O | \| | \| | \| | \| | 0.05 |
| 176.500 | 0.00 | 0.02 | 0.058 | O | \| | \| | \| | \| | 0.05 |
| 176.583 | 0.00 | 0.02 | 0.058 | O | \| | \| | \| | \| | 0.05 |
| 176.667 | 0.00 | 0.02 | 0.057 | O | \| | \| | \| | \| | 0.05 |
| 176.750 | 0.00 | 0.02 | 0.057 | O | \| | \| | \| | \| | 0.05 |
| 176.833 | 0.00 | 0.02 | 0.057 | O | \| | \| | \| | \| | 0.05 |
| 176.917 | 0.00 | 0.02 | 0.057 | O | \| | \| | \| | \| | 0.05 |
| 177.000 | 0.00 | 0.02 | 0.057 | O | \| | \| | \| | \| | 0.05 |
| 177.083 | 0.00 | 0.02 | 0.057 | O | \| | \| | \| | \| | 0.05 |
| 177.167 | 0.00 | 0.02 | 0.057 | O | \| | \| | \| | \| | 0.05 |
| 177.250 | 0.00 | 0.02 | 0.057 | O | \| | \| | \| | \| | 0.05 |
| 177.333 | 0.00 | 0.02 | 0.057 | O | \| | \| | \| | \| | 0.05 |
| 177.417 | 0.00 | 0.02 | 0.056 | O | \| | \| | \| | \| | 0.05 |
| 177.500 | 0.00 | 0.02 | 0.056 | O | \| | \| | \| | \| | 0.05 |
| 177.583 | 0.00 | 0.02 | 0.056 | O | \| | \| | \| | \| | 0.05 |
| 177.667 | 0.00 | 0.02 | 0.056 | O | \| | \| | \| | \| | 0.05 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 177.750 | 0.00 | 0.02 | 0.056 | O | \| | \| | \| | \| | 0.05 |
| 177.833 | 0.00 | 0.02 | 0.056 | O | \| | \| | \| | \| | 0.05 |
| 177.917 | 0.00 | 0.02 | 0.056 | O | \| | \| | \| | \| | 0.05 |
| 178.000 | 0.00 | 0.02 | 0.056 | O | \| | \| | \| | \| | 0.05 |
| 178.083 | 0.00 | 0.02 | 0.056 | O | \| | \| | \| | \| | 0.05 |
| 178.167 | 0.00 | 0.02 | 0.055 | O | \| | \| | \| | \| | 0.05 |
| 178.250 | 0.00 | 0.02 | 0.055 | O | \| | \| | \| | \| | 0.04 |
| 178.333 | 0.00 | 0.02 | 0.055 | O | \| | \| | \| | \| | 0.04 |
| 178.417 | 0.00 | 0.02 | 0.055 | O | \| | \| | \| | \| | 0.04 |
| 178.500 | 0.00 | 0.02 | 0.055 | O | \| | \| | \| | \| | 0.04 |
| 178.583 | 0.00 | 0.02 | 0.055 | O | \| | \| | \| | \| | 0.04 |
| 178.667 | 0.00 | 0.02 | 0.055 | O | \| | \| | \| | \| | 0.04 |
| 178.750 | 0.00 | 0.02 | 0.055 | O | \| | \| | \| | \| | 0.04 |
| 178.833 | 0.00 | 0.02 | 0.055 | O | \| | \| | \| | \| | 0.04 |
| 178.917 | 0.00 | 0.02 | 0.055 | O | \| | \| | \| | \| | 0.04 |
| 179.000 | 0.00 | 0.02 | 0.054 | O | \| | \| | \| | \| | 0.04 |
| 179.083 | 0.00 | 0.02 | 0.054 | O | \| | \| | \| | \| | 0.04 |
| 179.167 | 0.00 | 0.02 | 0.054 | O | \| | \| | \| | \| | 0.04 |
| 179.250 | 0.00 | 0.02 | 0.054 | O | \| | \| | \| | \| | 0.04 |
| 179.333 | 0.00 | 0.02 | 0.054 | O | \| | \| | \| | \| | 0.04 |
| 179.417 | 0.00 | 0.02 | 0.054 | O | \| | \| | \| | \| | 0.04 |
| 179.500 | 0.00 | 0.02 | 0.054 | O | \| | \| | \| | \| | 0.04 |
| 179.583 | 0.00 | 0.01 | 0.054 | O | \| | \| | \| | \| | 0.04 |
| 179.667 | 0.00 | 0.01 | 0.054 | O | \| | \| | \| | \| | 0.04 |
| 179.750 | 0.00 | 0.01 | 0.053 | O | \| | \| | \| | \| | 0.04 |
| 179.833 | 0.00 | 0.01 | 0.053 | O | \| | \| | \| | \| | 0.04 |
| 179.917 | 0.00 | 0.01 | 0.053 | O | \| | \| | \| | \| | 0.04 |
| 180.000 | 0.00 | 0.01 | 0.053 | O | \| | \| | \| | \| | 0.04 |
| 180.083 | 0.00 | 0.01 | 0.053 | O | \| | \| | \| | \| | 0.04 |
| 180.167 | 0.00 | 0.01 | 0.053 | O | \| | \| | \| | \| | 0.04 |
| 180.250 | 0.00 | 0.01 | 0.053 | O | \| | \| | \| | \| | 0.04 |
| 180.333 | 0.00 | 0.01 | 0.053 | O | \| | \| | \| | \| | 0.04 |
| 180.417 | 0.00 | 0.01 | 0.053 | O | \| | \| | \| | \| | 0.04 |
| 180.500 | 0.00 | 0.01 | 0.053 | O | \| | \| | \| | \| | 0.04 |
| 180.583 | 0.00 | 0.01 | 0.052 | O | \| | \| | \| | \| | 0.04 |
| 180.667 | 0.00 | 0.01 | 0.052 | O | \| | \| | \| | \| | 0.04 |
| 180.750 | 0.00 | 0.01 | 0.052 | O | \| | \| | \| | \| | 0.04 |
| 180.833 | 0.00 | 0.01 | 0.052 | O | \| | \| | \| | \| | 0.04 |
| 180.917 | 0.00 | 0.01 | 0.052 | O | \| | \| | \| | \| | 0.04 |
| 181.000 | 0.00 | 0.01 | 0.052 | O | \| | \| | \| | \| | 0.04 |
| 181.083 | 0.00 | 0.01 | 0.052 | O | \| | \| | \| | \| | 0.04 |
| 181.167 | 0.00 | 0.01 | 0.052 | O | \| | \| | \| | \| | 0.04 |
| 181.250 | 0.00 | 0.01 | 0.052 | O | \| | \| | \| | \| | 0.04 |
| 181.333 | 0.00 | 0.01 | 0.052 | O | \| | \| | \| | \| | 0.04 |
| 181.417 | 0.00 | 0.01 | 0.051 | O | \| | \| | \| | \| | 0.04 |
| 181.500 | 0.00 | 0.01 | 0.051 | O | \| | \| | \| | \| | 0.04 |
| 181.583 | 0.00 | 0.01 | 0.051 | O | \| | \| | \| | \| | 0.04 |
| 181.667 | 0.00 | 0.01 | 0.051 | O | \| | \| | \| | \| | 0.04 |
| 181.750 | 0.00 | 0.01 | 0.051 | O | \| | \| | \| | \| | 0.04 |
| 181.833 | 0.00 | 0.01 | 0.051 | O | \| | \| | \| | \| | 0.04 |
| 181.917 | 0.00 | 0.01 | 0.051 | O | \| | \| | \| | \| | 0.04 |
| 182.000 | 0.00 | 0.01 | 0.051 | O | \| | \| | \| | \| | 0.04 |
| 182.083 | 0.00 | 0.01 | 0.051 | O | \| | \| | \| | \| | 0.04 |
| 182.167 | 0.00 | 0.01 | 0.051 | O | \| | \| | \| | \| | 0.04 |
| 182.250 | 0.00 | 0.01 | 0.050 | O | \| | \| | \| | \| | 0.04 |
| 182.333 | 0.00 | 0.01 | 0.050 | O | \| | \| | \| | \| | 0.04 |
| 182.417 | 0.00 | 0.01 | 0.050 | O | \| | \| | \| | \| | 0.04 |
| 182.500 | 0.00 | 0.01 | 0.050 | O | \| | \| | \| | \| | 0.04 |
| 182.583 | 0.00 | 0.01 | 0.050 | O | \| | \| | \| | \| | 0.04 |
| 182.667 | 0.00 | 0.01 | 0.050 | O | \| | \| | \| | \| | 0.04 |
| 182.750 | 0.00 | 0.01 | 0.050 | O | \| | \| | \| | \| | 0.04 |
| 182.833 | 0.00 | 0.01 | 0.050 | O | \| | \| | \| | \| | 0.04 |
| 182.917 | 0.00 | 0.01 | 0.050 | O | \| | \| | \| | \| | 0.04 |
| 183.000 | 0.00 | 0.01 | 0.050 | O | \| | \| | \| | \| | 0.04 |
| 183.083 | 0.00 | 0.01 | 0.050 | O | \| | \| | \| | \| | 0.04 |
| 183.167 | 0.00 | 0.01 | 0.049 | O | \| | \| | \| | \| | 0.04 |
| 183.250 | 0.00 | 0.01 | 0.049 | O | \| | \| | \| | \| | 0.04 |
| 183.333 | 0.00 | 0.01 | 0.049 | O | \| | \| | \| | \| | 0.04 |
| 183.417 | 0.00 | 0.01 | 0.049 | O | \| | \| | \| | \| | 0.04 |
| 183.500 | 0.00 | 0.01 | 0.049 | O | \| | \| | \| | \| | 0.04 |
| 183.583 | 0.00 | 0.01 | 0.049 | O | \| | \| | \| | \| | 0.04 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 183.667 | 0.00 | 0.01 | 0.049 | O | \| | \| | \| | \| | 0.04 |
| 183.750 | 0.00 | 0.01 | 0.049 | O | \| | \| | \| | \| | 0.04 |
| 183.833 | 0.00 | 0.01 | 0.049 | O | \| | \| | \| | \| | 0.04 |
| 183.917 | 0.00 | 0.01 | 0.049 | O | \| | \| | \| | \| | 0.04 |
| 184.000 | 0.00 | 0.01 | 0.048 | O | \| | \| | \| | \| | 0.04 |
| 184.083 | 0.00 | 0.01 | 0.048 | O | \| | \| | \| | \| | 0.04 |
| 184.167 | 0.00 | 0.01 | 0.048 | O | \| | \| | \| | \| | 0.04 |
| 184.250 | 0.00 | 0.01 | 0.048 | O | \| | \| | \| | \| | 0.04 |
| 184.333 | 0.00 | 0.01 | 0.048 | O | \| | \| | \| | \| | 0.04 |
| 184.417 | 0.00 | 0.01 | 0.048 | O | \| | \| | \| | \| | 0.04 |
| 184.500 | 0.00 | 0.01 | 0.048 | O | \| | \| | \| | \| | 0.04 |
| 184.583 | 0.00 | 0.01 | 0.048 | O | \| | \| | \| | \| | 0.04 |
| 184.667 | 0.00 | 0.01 | 0.048 | O | \| | \| | \| | \| | 0.04 |
| 184.750 | 0.00 | 0.01 | 0.048 | O | \| | \| | \| | \| | 0.04 |
| 184.833 | 0.00 | 0.01 | 0.048 | O | \| | \| | \| | \| | 0.04 |
| 184.917 | 0.00 | 0.01 | 0.047 | O | \| | \| | \| | \| | 0.04 |
| 185.000 | 0.00 | 0.01 | 0.047 | O | \| | \| | \| | \| | 0.04 |
| 185.083 | 0.00 | 0.01 | 0.047 | O | \| | \| | \| | \| | 0.04 |
| 185.167 | 0.00 | 0.01 | 0.047 | O | \| | \| | \| | \| | 0.04 |
| 185.250 | 0.00 | 0.01 | 0.047 | O | \| | \| | \| | \| | 0.04 |
| 185.333 | 0.00 | 0.01 | 0.047 | O | \| | \| | \| | \| | 0.04 |
| 185.417 | 0.00 | 0.01 | 0.047 | O | \| | \| | \| | \| | 0.04 |
| 185.500 | 0.00 | 0.01 | 0.047 | O | \| | \| | \| | \| | 0.04 |
| 185.583 | 0.00 | 0.01 | 0.047 | O | \| | \| | \| | \| | 0.04 |
| 185.667 | 0.00 | 0.01 | 0.047 | O | \| | \| | \| | \| | 0.04 |
| 185.750 | 0.00 | 0.01 | 0.047 | O | \| | \| | \| | \| | 0.04 |
| 185.833 | 0.00 | 0.01 | 0.046 | O | \| | \| | \| | \| | 0.04 |
| 185.917 | 0.00 | 0.01 | 0.046 | O | \| | \| | \| | \| | 0.04 |
| 186.000 | 0.00 | 0.01 | 0.046 | O | \| | \| | \| | \| | 0.04 |
| 186.083 | 0.00 | 0.01 | 0.046 | O | \| | \| | \| | \| | 0.04 |
| 186.167 | 0.00 | 0.01 | 0.046 | O | \| | \| | \| | \| | 0.04 |
| 186.250 | 0.00 | 0.01 | 0.046 | O | \| | \| | \| | \| | 0.04 |
| 186.333 | 0.00 | 0.01 | 0.046 | O | \| | \| | \| | \| | 0.04 |
| 186.417 | 0.00 | 0.01 | 0.046 | O | \| | \| | \| | \| | 0.04 |
| 186.500 | 0.00 | 0.01 | 0.046 | O | \| | \| | \| | \| | 0.04 |
| 186.583 | 0.00 | 0.01 | 0.046 | O | \| | \| | \| | \| | 0.04 |
| 186.667 | 0.00 | 0.01 | 0.046 | O | \| | \| | \| | \| | 0.04 |
| 186.750 | 0.00 | 0.01 | 0.045 | O | \| | \| | \| | \| | 0.04 |
| 186.833 | 0.00 | 0.01 | 0.045 | O | \| | \| | \| | \| | 0.04 |
| 186.917 | 0.00 | 0.01 | 0.045 | O | \| | \| | \| | \| | 0.04 |
| 187.000 | 0.00 | 0.01 | 0.045 | O | \| | \| | \| | \| | 0.04 |
| 187.083 | 0.00 | 0.01 | 0.045 | O | \| | \| | \| | \| | 0.04 |
| 187.167 | 0.00 | 0.01 | 0.045 | O | \| | \| | \| | \| | 0.04 |
| 187.250 | 0.00 | 0.01 | 0.045 | O | \| | \| | \| | \| | 0.04 |
| 187.333 | 0.00 | 0.01 | 0.045 | O | \| | \| | \| | \| | 0.04 |
| 187.417 | 0.00 | 0.01 | 0.045 | O | \| | \| | \| | \| | 0.04 |
| 187.500 | 0.00 | 0.01 | 0.045 | O | \| | \| | \| | \| | 0.04 |
| 187.583 | 0.00 | 0.01 | 0.045 | O | \| | \| | \| | \| | 0.04 |
| 187.667 | 0.00 | 0.01 | 0.045 | O | \| | \| | \| | \| | 0.04 |
| 187.750 | 0.00 | 0.01 | 0.044 | O | \| | \| | \| | \| | 0.04 |
| 187.833 | 0.00 | 0.01 | 0.044 | O | \| | \| | \| | \| | 0.04 |
| 187.917 | 0.00 | 0.01 | 0.044 | O | \| | \| | \| | \| | 0.04 |
| 188.000 | 0.00 | 0.01 | 0.044 | O | \| | \| | \| | \| | 0.04 |
| 188.083 | 0.00 | 0.01 | 0.044 | O | \| | \| | \| | \| | 0.04 |
| 188.167 | 0.00 | 0.01 | 0.044 | O | \| | \| | \| | \| | 0.04 |
| 188.250 | 0.00 | 0.01 | 0.044 | O | \| | \| | \| | \| | 0.04 |
| 188.333 | 0.00 | 0.01 | 0.044 | O | \| | \| | \| | \| | 0.04 |
| 188.417 | 0.00 | 0.01 | 0.044 | O | \| | \| | \| | \| | 0.04 |
| 188.500 | 0.00 | 0.01 | 0.044 | O | \| | \| | \| | \| | 0.04 |
| 188.583 | 0.00 | 0.01 | 0.044 | O | \| | \| | \| | \| | 0.04 |
| 188.667 | 0.00 | 0.01 | 0.044 | O | \| | \| | \| | \| | 0.04 |
| 188.750 | 0.00 | 0.01 | 0.043 | O | \| | \| | \| | \| | 0.04 |
| 188.833 | 0.00 | 0.01 | 0.043 | O | \| | \| | \| | \| | 0.04 |
| 188.917 | 0.00 | 0.01 | 0.043 | O | \| | \| | \| | \| | 0.04 |
| 189.000 | 0.00 | 0.01 | 0.043 | O | \| | \| | \| | \| | 0.04 |
| 189.083 | 0.00 | 0.01 | 0.043 | O | \| | \| | \| | \| | 0.03 |
| 189.167 | 0.00 | 0.01 | 0.043 | O | \| | \| | \| | \| | 0.03 |
| 189.250 | 0.00 | 0.01 | 0.043 | O | \| | \| | \| | \| | 0.03 |
| 189.333 | 0.00 | 0.01 | 0.043 | O | \| | \| | \| | \| | 0.03 |
| 189.417 | 0.00 | 0.01 | 0.043 | O | \| | \| | \| | \| | 0.03 |
| 189.500 | 0.00 | 0.01 | 0.043 | O | \| | \| | \| | \| | 0.03 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 189.583 | 0.00 | 0.01 | 0.043 | O | \| | \| | \| | \| | 0.03 |
| 189.667 | 0.00 | 0.01 | 0.043 | O | \| | \| | \| | \| | 0.03 |
| 189.750 | 0.00 | 0.01 | 0.042 | O | \| | \| | \| | \| | 0.03 |
| 189.833 | 0.00 | 0.01 | 0.042 | O | \| | \| | \| | \| | 0.03 |
| 189.917 | 0.00 | 0.01 | 0.042 | O | \| | \| | \| | \| | 0.03 |
| 190.000 | 0.00 | 0.01 | 0.042 | O | \| | \| | \| | \| | 0.03 |
| 190.083 | 0.00 | 0.01 | 0.042 | O | \| | \| | \| | \| | 0.03 |
| 190.167 | 0.00 | 0.01 | 0.042 | O | \| | \| | \| | \| | 0.03 |
| 190.250 | 0.00 | 0.01 | 0.042 | O | \| | \| | \| | \| | 0.03 |
| 190.333 | 0.00 | 0.01 | 0.042 | O | \| | \| | \| | \| | 0.03 |
| 190.417 | 0.00 | 0.01 | 0.042 | O | \| | \| | \| | \| | 0.03 |
| 190.500 | 0.00 | 0.01 | 0.042 | O | \| | \| | \| | \| | 0.03 |
| 190.583 | 0.00 | 0.01 | 0.042 | O | \| | \| | \| | \| | 0.03 |
| 190.667 | 0.00 | 0.01 | 0.042 | O | \| | \| | \| | \| | 0.03 |
| 190.750 | 0.00 | 0.01 | 0.041 | O | \| | \| | \| | \| | 0.03 |
| 190.833 | 0.00 | 0.01 | 0.041 | O | \| | \| | \| | \| | 0.03 |
| 190.917 | 0.00 | 0.01 | 0.041 | O | \| | \| | \| | \| | 0.03 |
| 191.000 | 0.00 | 0.01 | 0.041 | O | \| | \| | \| | \| | 0.03 |
| 191.083 | 0.00 | 0.01 | 0.041 | O | \| | \| | \| | \| | 0.03 |
| 191.167 | 0.00 | 0.01 | 0.041 | O | \| | \| | \| | \| | 0.03 |
| 191.250 | 0.00 | 0.01 | 0.041 | O | \| | \| | \| | \| | 0.03 |
| 191.333 | 0.00 | 0.01 | 0.041 | O | \| | \| | \| | \| | 0.03 |
| 191.417 | 0.00 | 0.01 | 0.041 | O | \| | \| | \| | \| | 0.03 |
| 191.500 | 0.00 | 0.01 | 0.041 | O | \| | \| | \| | \| | 0.03 |
| 191.583 | 0.00 | 0.01 | 0.041 | O | \| | \| | \| | \| | 0.03 |
| 191.667 | 0.00 | 0.01 | 0.041 | O | \| | \| | \| | \| | 0.03 |
| 191.750 | 0.00 | 0.01 | 0.041 | O | \| | \| | \| | \| | 0.03 |
| 191.833 | 0.00 | 0.01 | 0.040 | O | \| | \| | \| | \| | 0.03 |
| 191.917 | 0.00 | 0.01 | 0.040 | O | \| | \| | \| | \| | 0.03 |
| 192.000 | 0.00 | 0.01 | 0.040 | O | \| | \| | \| | \| | 0.03 |
| 192.083 | 0.00 | 0.01 | 0.040 | O | \| | \| | \| | \| | 0.03 |
| 192.167 | 0.00 | 0.01 | 0.040 | O | \| | \| | \| | \| | 0.03 |
| 192.250 | 0.00 | 0.01 | 0.040 | O | \| | \| | \| | \| | 0.03 |
| 192.333 | 0.00 | 0.01 | 0.040 | O | \| | \| | \| | \| | 0.03 |
| 192.417 | 0.00 | 0.01 | 0.040 | O | \| | \| | \| | \| | 0.03 |
| 192.500 | 0.00 | 0.01 | 0.040 | O | \| | \| | \| | \| | 0.03 |
| 192.583 | 0.00 | 0.01 | 0.040 | O | \| | \| | \| | \| | 0.03 |
| 192.667 | 0.00 | 0.01 | 0.040 | O | \| | \| | \| | \| | 0.03 |
| 192.750 | 0.00 | 0.01 | 0.040 | O | \| | \| | \| | \| | 0.03 |
| 192.833 | 0.00 | 0.01 | 0.040 | O | \| | \| | \| | \| | 0.03 |
| 192.917 | 0.00 | 0.01 | 0.039 | O | \| | \| | \| | \| | 0.03 |
| 193.000 | 0.00 | 0.01 | 0.039 | O | \| | \| | \| | \| | 0.03 |
| 193.083 | 0.00 | 0.01 | 0.039 | O | \| | \| | \| | \| | 0.03 |
| 193.167 | 0.00 | 0.01 | 0.039 | O | \| | \| | \| | \| | 0.03 |
| 193.250 | 0.00 | 0.01 | 0.039 | O | \| | \| | \| | \| | 0.03 |
| 193.333 | 0.00 | 0.01 | 0.039 | O | \| | \| | \| | \| | 0.03 |
| 193.417 | 0.00 | 0.01 | 0.039 | O | \| | \| | \| | \| | 0.03 |
| 193.500 | 0.00 | 0.01 | 0.039 | O | \| | \| | \| | \| | 0.03 |
| 193.583 | 0.00 | 0.01 | 0.039 | O | \| | \| | \| | \| | 0.03 |
| 193.667 | 0.00 | 0.01 | 0.039 | O | \| | \| | \| | \| | 0.03 |
| 193.750 | 0.00 | 0.01 | 0.039 | O | \| | \| | \| | \| | 0.03 |
| 193.833 | 0.00 | 0.01 | 0.039 | O | \| | \| | \| | \| | 0.03 |
| 193.917 | 0.00 | 0.01 | 0.039 | O | \| | \| | \| | \| | 0.03 |
| 194.000 | 0.00 | 0.01 | 0.038 | O | \| | \| | \| | \| | 0.03 |
| 194.083 | 0.00 | 0.01 | 0.038 | O | \| | \| | \| | \| | 0.03 |
| 194.167 | 0.00 | 0.01 | 0.038 | O | \| | \| | \| | \| | 0.03 |
| 194.250 | 0.00 | 0.01 | 0.038 | O | \| | \| | \| | \| | 0.03 |
| 194.333 | 0.00 | 0.01 | 0.038 | O | \| | \| | \| | \| | 0.03 |
| 194.417 | 0.00 | 0.01 | 0.038 | O | \| | \| | \| | \| | 0.03 |
| 194.500 | 0.00 | 0.01 | 0.038 | O | \| | \| | \| | \| | 0.03 |
| 194.583 | 0.00 | 0.01 | 0.038 | O | \| | \| | \| | \| | 0.03 |
| 194.667 | 0.00 | 0.01 | 0.038 | O | \| | \| | \| | \| | 0.03 |
| 194.750 | 0.00 | 0.01 | 0.038 | O | \| | \| | \| | \| | 0.03 |
| 194.833 | 0.00 | 0.01 | 0.038 | O | \| | \| | \| | \| | 0.03 |
| 194.917 | 0.00 | 0.01 | 0.038 | O | \| | \| | \| | \| | 0.03 |
| 195.000 | 0.00 | 0.01 | 0.038 | O | \| | \| | \| | \| | 0.03 |
| 195.083 | 0.00 | 0.01 | 0.038 | O | \| | \| | \| | \| | 0.03 |
| 195.167 | 0.00 | 0.01 | 0.037 | O | \| | \| | \| | \| | 0.03 |
| 195.250 | 0.00 | 0.01 | 0.037 | O | \| | \| | \| | \| | 0.03 |
| 195.333 | 0.00 | 0.01 | 0.037 | O | \| | \| | \| | \| | 0.03 |
| 195.417 | 0.00 | 0.01 | 0.037 | O | \| | \| | \| | \| | 0.03 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 195.500 | 0.00 | 0.01 | 0.037 | O | \| | \| | \| | \| | 0.03 |
| 195.583 | 0.00 | 0.01 | 0.037 | O | \| | \| | \| | \| | 0.03 |
| 195.667 | 0.00 | 0.01 | 0.037 | O | \| | \| | \| | \| | 0.03 |
| 195.750 | 0.00 | 0.01 | 0.037 | O | \| | \| | \| | \| | 0.03 |
| 195.833 | 0.00 | 0.01 | 0.037 | O | \| | \| | \| | \| | 0.03 |
| 195.917 | 0.00 | 0.01 | 0.037 | O | \| | \| | \| | \| | 0.03 |
| 196.000 | 0.00 | 0.01 | 0.037 | O | \| | \| | \| | \| | 0.03 |
| 196.083 | 0.00 | 0.01 | 0.037 | O | \| | \| | \| | \| | 0.03 |
| 196.167 | 0.00 | 0.01 | 0.037 | O | \| | \| | \| | \| | 0.03 |
| 196.250 | 0.00 | 0.01 | 0.037 | O | \| | \| | \| | \| | 0.03 |
| 196.333 | 0.00 | 0.01 | 0.036 | O | \| | \| | \| | \| | 0.03 |
| 196.417 | 0.00 | 0.01 | 0.036 | O | \| | \| | \| | \| | 0.03 |
| 196.500 | 0.00 | 0.01 | 0.036 | O | \| | \| | \| | \| | 0.03 |
| 196.583 | 0.00 | 0.01 | 0.036 | O | \| | \| | \| | \| | 0.03 |
| 196.667 | 0.00 | 0.01 | 0.036 | O | \| | \| | \| | \| | 0.03 |
| 196.750 | 0.00 | 0.01 | 0.036 | O | \| | \| | \| | \| | 0.03 |
| 196.833 | 0.00 | 0.01 | 0.036 | O | \| | \| | \| | \| | 0.03 |
| 196.917 | 0.00 | 0.01 | 0.036 | O | \| | \| | \| | \| | 0.03 |
| 197.000 | 0.00 | 0.01 | 0.036 | O | \| | \| | \| | \| | 0.03 |
| 197.083 | 0.00 | 0.01 | 0.036 | O | \| | \| | \| | \| | 0.03 |
| 197.167 | 0.00 | 0.01 | 0.036 | O | \| | \| | \| | \| | 0.03 |
| 197.250 | 0.00 | 0.01 | 0.036 | O | \| | \| | \| | \| | 0.03 |
| 197.333 | 0.00 | 0.01 | 0.036 | O | \| | \| | \| | \| | 0.03 |
| 197.417 | 0.00 | 0.01 | 0.036 | O | \| | \| | \| | \| | 0.03 |
| 197.500 | 0.00 | 0.01 | 0.035 | O | \| | \| | \| | \| | 0.03 |
| 197.583 | 0.00 | 0.01 | 0.035 | O | \| | \| | \| | \| | 0.03 |
| 197.667 | 0.00 | 0.01 | 0.035 | O | \| | \| | \| | \| | 0.03 |
| 197.750 | 0.00 | 0.01 | 0.035 | O | \| | \| | \| | \| | 0.03 |
| 197.833 | 0.00 | 0.01 | 0.035 | O | \| | \| | \| | \| | 0.03 |
| 197.917 | 0.00 | 0.01 | 0.035 | O | \| | \| | \| | \| | 0.03 |
| 198.000 | 0.00 | 0.01 | 0.035 | O | \| | \| | \| | \| | 0.03 |
| 198.083 | 0.00 | 0.01 | 0.035 | O | \| | \| | \| | \| | 0.03 |
| 198.167 | 0.00 | 0.01 | 0.035 | O | \| | \| | \| | \| | 0.03 |
| 198.250 | 0.00 | 0.01 | 0.035 | O | \| | \| | \| | \| | 0.03 |
| 198.333 | 0.00 | 0.01 | 0.035 | O | \| | \| | \| | \| | 0.03 |
| 198.417 | 0.00 | 0.01 | 0.035 | O | \| | \| | \| | \| | 0.03 |
| 198.500 | 0.00 | 0.01 | 0.035 | O | \| | \| | \| | \| | 0.03 |
| 198.583 | 0.00 | 0.01 | 0.035 | O | \| | \| | \| | \| | 0.03 |
| 198.667 | 0.00 | 0.01 | 0.035 | O | \| | \| | \| | \| | 0.03 |
| 198.750 | 0.00 | 0.01 | 0.034 | O | \| | \| | \| | \| | 0.03 |
| 198.833 | 0.00 | 0.01 | 0.034 | O | \| | \| | \| | \| | 0.03 |
| 198.917 | 0.00 | 0.01 | 0.034 | O | \| | \| | \| | \| | 0.03 |
| 199.000 | 0.00 | 0.01 | 0.034 | O | \| | \| | \| | \| | 0.03 |
| 199.083 | 0.00 | 0.01 | 0.034 | O | \| | \| | \| | \| | 0.03 |
| 199.167 | 0.00 | 0.01 | 0.034 | O | \| | \| | \| | \| | 0.03 |
| 199.250 | 0.00 | 0.01 | 0.034 | O | \| | \| | \| | \| | 0.03 |
| 199.333 | 0.00 | 0.01 | 0.034 | O | \| | \| | \| | \| | 0.03 |
| 199.417 | 0.00 | 0.01 | 0.034 | O | \| | \| | \| | \| | 0.03 |
| 199.500 | 0.00 | 0.01 | 0.034 | O | \| | \| | \| | \| | 0.03 |
| 199.583 | 0.00 | 0.01 | 0.034 | O | \| | \| | \| | \| | 0.03 |
| 199.667 | 0.00 | 0.01 | 0.034 | O | \| | \| | \| | \| | 0.03 |
| 199.750 | 0.00 | 0.01 | 0.034 | O | \| | \| | \| | \| | 0.03 |
| 199.833 | 0.00 | 0.01 | 0.034 | O | \| | \| | \| | \| | 0.03 |
| 199.917 | 0.00 | 0.01 | 0.034 | O | \| | \| | \| | \| | 0.03 |
| 200.000 | 0.00 | 0.01 | 0.034 | O | \| | \| | \| | \| | 0.03 |
| 200.083 | 0.00 | 0.01 | 0.033 | O | \| | \| | \| | \| | 0.03 |
| 200.167 | 0.00 | 0.01 | 0.033 | O | \| | \| | \| | \| | 0.03 |
| 200.250 | 0.00 | 0.01 | 0.033 | O | \| | \| | \| | \| | 0.03 |
| 200.333 | 0.00 | 0.01 | 0.033 | O | \| | \| | \| | \| | 0.03 |
| 200.417 | 0.00 | 0.01 | 0.033 | O | \| | \| | \| | \| | 0.03 |
| 200.500 | 0.00 | 0.01 | 0.033 | O | \| | \| | \| | \| | 0.03 |
| 200.583 | 0.00 | 0.01 | 0.033 | O | \| | \| | \| | \| | 0.03 |
| 200.667 | 0.00 | 0.01 | 0.033 | O | \| | \| | \| | \| | 0.03 |
| 200.750 | 0.00 | 0.01 | 0.033 | O | \| | \| | \| | \| | 0.03 |
| 200.833 | 0.00 | 0.01 | 0.033 | O | \| | \| | \| | \| | 0.03 |
| 200.917 | 0.00 | 0.01 | 0.033 | O | \| | \| | \| | \| | 0.03 |
| 201.000 | 0.00 | 0.01 | 0.033 | O | \| | \| | \| | \| | 0.03 |
| 201.083 | 0.00 | 0.01 | 0.033 | O | \| | \| | \| | \| | 0.03 |
| 201.167 | 0.00 | 0.01 | 0.033 | O | \| | \| | \| | \| | 0.03 |
| 201.250 | 0.00 | 0.01 | 0.033 | O | \| | \| | \| | \| | 0.03 |
| 201.333 | 0.00 | 0.01 | 0.032 | O | \| | \| | \| | \| | 0.03 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 201.417 | 0.00 | 0.01 | 0.032 | O | \| | \| | \| | \| | 0.03 |
| 201.500 | 0.00 | 0.01 | 0.032 | O | \| | \| | \| | \| | 0.03 |
| 201.583 | 0.00 | 0.01 | 0.032 | O | \| | \| | \| | \| | 0.03 |
| 201.667 | 0.00 | 0.01 | 0.032 | O | \| | \| | \| | \| | 0.03 |
| 201.750 | 0.00 | 0.01 | 0.032 | O | \| | \| | \| | \| | 0.03 |
| 201.833 | 0.00 | 0.01 | 0.032 | O | \| | \| | \| | \| | 0.03 |
| 201.917 | 0.00 | 0.01 | 0.032 | O | \| | \| | \| | \| | 0.03 |
| 202.000 | 0.00 | 0.01 | 0.032 | O | \| | \| | \| | \| | 0.03 |
| 202.083 | 0.00 | 0.01 | 0.032 | O | \| | \| | \| | \| | 0.03 |
| 202.167 | 0.00 | 0.01 | 0.032 | O | \| | \| | \| | \| | 0.03 |
| 202.250 | 0.00 | 0.01 | 0.032 | O | \| | \| | \| | \| | 0.03 |
| 202.333 | 0.00 | 0.01 | 0.032 | O | \| | \| | \| | \| | 0.03 |
| 202.417 | 0.00 | 0.01 | 0.032 | O | \| | \| | \| | \| | 0.03 |
| 202.500 | 0.00 | 0.01 | 0.032 | O | \| | \| | \| | \| | 0.03 |
| 202.583 | 0.00 | 0.01 | 0.032 | O | \| | \| | \| | \| | 0.03 |
| 202.667 | 0.00 | 0.01 | 0.032 | O | \| | \| | \| | \| | 0.03 |
| 202.750 | 0.00 | 0.01 | 0.031 | O | \| | \| | \| | \| | 0.03 |
| 202.833 | 0.00 | 0.01 | 0.031 | O | \| | \| | \| | \| | 0.03 |
| 202.917 | 0.00 | 0.01 | 0.031 | O | \| | \| | \| | \| | 0.03 |
| 203.000 | 0.00 | 0.01 | 0.031 | O | \| | \| | \| | \| | 0.03 |
| 203.083 | 0.00 | 0.01 | 0.031 | O | \| | \| | \| | \| | 0.03 |
| 203.167 | 0.00 | 0.01 | 0.031 | O | \| | \| | \| | \| | 0.03 |
| 203.250 | 0.00 | 0.01 | 0.031 | O | \| | \| | \| | \| | 0.03 |
| 203.333 | 0.00 | 0.01 | 0.031 | O | \| | \| | \| | \| | 0.03 |
| 203.417 | 0.00 | 0.01 | 0.031 | O | \| | \| | \| | \| | 0.03 |
| 203.500 | 0.00 | 0.01 | 0.031 | O | \| | \| | \| | \| | 0.03 |
| 203.583 | 0.00 | 0.01 | 0.031 | O | \| | \| | \| | \| | 0.03 |
| 203.667 | 0.00 | 0.01 | 0.031 | O | \| | \| | \| | \| | 0.02 |
| 203.750 | 0.00 | 0.01 | 0.031 | O | \| | \| | \| | \| | 0.02 |
| 203.833 | 0.00 | 0.01 | 0.031 | O | \| | \| | \| | \| | 0.02 |
| 203.917 | 0.00 | 0.01 | 0.031 | O | \| | \| | \| | \| | 0.02 |
| 204.000 | 0.00 | 0.01 | 0.031 | O | \| | \| | \| | \| | 0.02 |
| 204.083 | 0.00 | 0.01 | 0.030 | O | \| | \| | \| | \| | 0.02 |
| 204.167 | 0.00 | 0.01 | 0.030 | O | \| | \| | \| | \| | 0.02 |
| 204.250 | 0.00 | 0.01 | 0.030 | O | \| | \| | \| | \| | 0.02 |
| 204.333 | 0.00 | 0.01 | 0.030 | O | \| | \| | \| | \| | 0.02 |
| 204.417 | 0.00 | 0.01 | 0.030 | O | \| | \| | \| | \| | 0.02 |
| 204.500 | 0.00 | 0.01 | 0.030 | O | \| | \| | \| | \| | 0.02 |
| 204.583 | 0.00 | 0.01 | 0.030 | O | \| | \| | \| | \| | 0.02 |
| 204.667 | 0.00 | 0.01 | 0.030 | O | \| | \| | \| | \| | 0.02 |
| 204.750 | 0.00 | 0.01 | 0.030 | O | \| | \| | \| | \| | 0.02 |
| 204.833 | 0.00 | 0.01 | 0.030 | O | \| | \| | \| | \| | 0.02 |
| 204.917 | 0.00 | 0.01 | 0.030 | O | \| | \| | \| | \| | 0.02 |
| 205.000 | 0.00 | 0.01 | 0.030 | O | \| | \| | \| | \| | 0.02 |
| 205.083 | 0.00 | 0.01 | 0.030 | O | \| | \| | \| | \| | 0.02 |
| 205.167 | 0.00 | 0.01 | 0.030 | O | \| | \| | \| | \| | 0.02 |
| 205.250 | 0.00 | 0.01 | 0.030 | O | \| | \| | \| | \| | 0.02 |
| 205.333 | 0.00 | 0.01 | 0.030 | O | \| | \| | \| | \| | 0.02 |
| 205.417 | 0.00 | 0.01 | 0.030 | O | \| | \| | \| | \| | 0.02 |
| 205.500 | 0.00 | 0.01 | 0.030 | O | \| | \| | \| | \| | 0.02 |
| 205.583 | 0.00 | 0.01 | 0.029 | O | \| | \| | \| | \| | 0.02 |
| 205.667 | 0.00 | 0.01 | 0.029 | O | \| | \| | \| | \| | 0.02 |
| 205.750 | 0.00 | 0.01 | 0.029 | O | \| | \| | \| | \| | 0.02 |
| 205.833 | 0.00 | 0.01 | 0.029 | O | \| | \| | \| | \| | 0.02 |
| 205.917 | 0.00 | 0.01 | 0.029 | O | \| | \| | \| | \| | 0.02 |
| 206.000 | 0.00 | 0.01 | 0.029 | O | \| | \| | \| | \| | 0.02 |
| 206.083 | 0.00 | 0.01 | 0.029 | O | \| | \| | \| | \| | 0.02 |
| 206.167 | 0.00 | 0.01 | 0.029 | O | \| | \| | \| | \| | 0.02 |
| 206.250 | 0.00 | 0.01 | 0.029 | O | \| | \| | \| | \| | 0.02 |
| 206.333 | 0.00 | 0.01 | 0.029 | O | \| | \| | \| | \| | 0.02 |
| 206.417 | 0.00 | 0.01 | 0.029 | O | \| | \| | \| | \| | 0.02 |
| 206.500 | 0.00 | 0.01 | 0.029 | O | \| | \| | \| | \| | 0.02 |
| 206.583 | 0.00 | 0.01 | 0.029 | O | \| | \| | \| | \| | 0.02 |
| 206.667 | 0.00 | 0.01 | 0.029 | O | \| | \| | \| | \| | 0.02 |
| 206.750 | 0.00 | 0.01 | 0.029 | O | \| | \| | \| | \| | 0.02 |
| 206.833 | 0.00 | 0.01 | 0.029 | O | \| | \| | \| | \| | 0.02 |
| 206.917 | 0.00 | 0.01 | 0.029 | O | \| | \| | \| | \| | 0.02 |
| 207.000 | 0.00 | 0.01 | 0.029 | O | \| | \| | \| | \| | 0.02 |
| 207.083 | 0.00 | 0.01 | 0.028 | O | \| | \| | \| | \| | 0.02 |
| 207.167 | 0.00 | 0.01 | 0.028 | O | \| | \| | \| | \| | 0.02 |
| 207.250 | 0.00 | 0.01 | 0.028 | O | \| | \| | \| | \| | 0.02 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 207.333 | 0.00 | 0.01 | 0.028 | O | \| | \| | \| | \| | 0.02 |
| 207.417 | 0.00 | 0.01 | 0.028 | O | \| | \| | \| | \| | 0.02 |
| 207.500 | 0.00 | 0.01 | 0.028 | O | \| | \| | \| | \| | 0.02 |
| 207.583 | 0.00 | 0.01 | 0.028 | O | \| | \| | \| | \| | 0.02 |
| 207.667 | 0.00 | 0.01 | 0.028 | O | \| | \| | \| | \| | 0.02 |
| 207.750 | 0.00 | 0.01 | 0.028 | O | \| | \| | \| | \| | 0.02 |
| 207.833 | 0.00 | 0.01 | 0.028 | O | \| | \| | \| | \| | 0.02 |
| 207.917 | 0.00 | 0.01 | 0.028 | O | \| | \| | \| | \| | 0.02 |
| 208.000 | 0.00 | 0.01 | 0.028 | O | \| | \| | \| | \| | 0.02 |
| 208.083 | 0.00 | 0.01 | 0.028 | O | \| | \| | \| | \| | 0.02 |
| 208.167 | 0.00 | 0.01 | 0.028 | O | \| | \| | \| | \| | 0.02 |
| 208.250 | 0.00 | 0.01 | 0.028 | O | \| | \| | \| | \| | 0.02 |
| 208.333 | 0.00 | 0.01 | 0.028 | O | \| | \| | \| | \| | 0.02 |
| 208.417 | 0.00 | 0.01 | 0.028 | O | \| | \| | \| | \| | 0.02 |
| 208.500 | 0.00 | 0.01 | 0.028 | O | \| | \| | \| | \| | 0.02 |
| 208.583 | 0.00 | 0.01 | 0.027 | O | \| | \| | \| | \| | 0.02 |
| 208.667 | 0.00 | 0.01 | 0.027 | O | \| | \| | \| | \| | 0.02 |
| 208.750 | 0.00 | 0.01 | 0.027 | O | \| | \| | \| | \| | 0.02 |
| 208.833 | 0.00 | 0.01 | 0.027 | O | \| | \| | \| | \| | 0.02 |
| 208.917 | 0.00 | 0.01 | 0.027 | O | \| | \| | \| | \| | 0.02 |
| 209.000 | 0.00 | 0.01 | 0.027 | O | \| | \| | \| | \| | 0.02 |
| 209.083 | 0.00 | 0.01 | 0.027 | O | \| | \| | \| | \| | 0.02 |
| 209.167 | 0.00 | 0.01 | 0.027 | O | \| | \| | \| | \| | 0.02 |
| 209.250 | 0.00 | 0.01 | 0.027 | O | \| | \| | \| | \| | 0.02 |
| 209.333 | 0.00 | 0.01 | 0.027 | O | \| | \| | \| | \| | 0.02 |
| 209.417 | 0.00 | 0.01 | 0.027 | O | \| | \| | \| | \| | 0.02 |
| 209.500 | 0.00 | 0.01 | 0.027 | O | \| | \| | \| | \| | 0.02 |
| 209.583 | 0.00 | 0.01 | 0.027 | O | \| | \| | \| | \| | 0.02 |
| 209.667 | 0.00 | 0.01 | 0.027 | O | \| | \| | \| | \| | 0.02 |
| 209.750 | 0.00 | 0.01 | 0.027 | O | \| | \| | \| | \| | 0.02 |
| 209.833 | 0.00 | 0.01 | 0.027 | O | \| | \| | \| | \| | 0.02 |
| 209.917 | 0.00 | 0.01 | 0.027 | O | \| | \| | \| | \| | 0.02 |
| 210.000 | 0.00 | 0.01 | 0.027 | O | \| | \| | \| | \| | 0.02 |
| 210.083 | 0.00 | 0.01 | 0.027 | O | \| | \| | \| | \| | 0.02 |
| 210.167 | 0.00 | 0.01 | 0.026 | O | \| | \| | \| | \| | 0.02 |
| 210.250 | 0.00 | 0.01 | 0.026 | O | \| | \| | \| | \| | 0.02 |
| 210.333 | 0.00 | 0.01 | 0.026 | O | \| | \| | \| | \| | 0.02 |
| 210.417 | 0.00 | 0.01 | 0.026 | O | \| | \| | \| | \| | 0.02 |
| 210.500 | 0.00 | 0.01 | 0.026 | O | \| | \| | \| | \| | 0.02 |
| 210.583 | 0.00 | 0.01 | 0.026 | O | \| | \| | \| | \| | 0.02 |
| 210.667 | 0.00 | 0.01 | 0.026 | O | \| | \| | \| | \| | 0.02 |
| 210.750 | 0.00 | 0.01 | 0.026 | O | \| | \| | \| | \| | 0.02 |
| 210.833 | 0.00 | 0.01 | 0.026 | O | \| | \| | \| | \| | 0.02 |
| 210.917 | 0.00 | 0.01 | 0.026 | O | \| | \| | \| | \| | 0.02 |
| 211.000 | 0.00 | 0.01 | 0.026 | O | \| | \| | \| | \| | 0.02 |
| 211.083 | 0.00 | 0.01 | 0.026 | O | \| | \| | \| | \| | 0.02 |
| 211.167 | 0.00 | 0.01 | 0.026 | O | \| | \| | \| | \| | 0.02 |
| 211.250 | 0.00 | 0.01 | 0.026 | O | \| | \| | \| | \| | 0.02 |
| 211.333 | 0.00 | 0.01 | 0.026 | O | \| | \| | \| | \| | 0.02 |
| 211.417 | 0.00 | 0.01 | 0.026 | O | \| | \| | \| | \| | 0.02 |
| 211.500 | 0.00 | 0.01 | 0.026 | O | \| | \| | \| | \| | 0.02 |
| 211.583 | 0.00 | 0.01 | 0.026 | O | \| | \| | \| | \| | 0.02 |
| 211.667 | 0.00 | 0.01 | 0.026 | O | \| | \| | \| | \| | 0.02 |
| 211.750 | 0.00 | 0.01 | 0.026 | O | \| | \| | \| | \| | 0.02 |
| 211.833 | 0.00 | 0.01 | 0.025 | O | \| | \| | \| | \| | 0.02 |
| 211.917 | 0.00 | 0.01 | 0.025 | O | \| | \| | \| | \| | 0.02 |
| 212.000 | 0.00 | 0.01 | 0.025 | O | \| | \| | \| | \| | 0.02 |
| 212.083 | 0.00 | 0.01 | 0.025 | O | \| | \| | \| | \| | 0.02 |
| 212.167 | 0.00 | 0.01 | 0.025 | O | \| | \| | \| | \| | 0.02 |
| 212.250 | 0.00 | 0.01 | 0.025 | O | \| | \| | \| | \| | 0.02 |
| 212.333 | 0.00 | 0.01 | 0.025 | O | \| | \| | \| | \| | 0.02 |
| 212.417 | 0.00 | 0.01 | 0.025 | O | \| | \| | \| | \| | 0.02 |
| 212.500 | 0.00 | 0.01 | 0.025 | O | \| | \| | \| | \| | 0.02 |
| 212.583 | 0.00 | 0.01 | 0.025 | O | \| | \| | \| | \| | 0.02 |
| 212.667 | 0.00 | 0.01 | 0.025 | O | \| | \| | \| | \| | 0.02 |
| 212.750 | 0.00 | 0.01 | 0.025 | O | \| | \| | \| | \| | 0.02 |
| 212.833 | 0.00 | 0.01 | 0.025 | O | \| | \| | \| | \| | 0.02 |
| 212.917 | 0.00 | 0.01 | 0.025 | O | \| | \| | \| | \| | 0.02 |
| 213.000 | 0.00 | 0.01 | 0.025 | O | \| | \| | \| | \| | 0.02 |
| 213.083 | 0.00 | 0.01 | 0.025 | O | \| | \| | \| | \| | 0.02 |
| 213.167 | 0.00 | 0.01 | 0.025 | O | \| | \| | \| | \| | 0.02 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 213.250 | 0.00 | 0.01 | 0.025 | O | \| | \| | \| | \| | 0.02 |
| 213.333 | 0.00 | 0.01 | 0.025 | O | \| | \| | \| | \| | 0.02 |
| 213.417 | 0.00 | 0.01 | 0.025 | O | \| | \| | \| | \| | 0.02 |
| 213.500 | 0.00 | 0.01 | 0.025 | O | \| | \| | \| | \| | 0.02 |
| 213.583 | 0.00 | 0.01 | 0.024 | O | \| | \| | \| | \| | 0.02 |
| 213.667 | 0.00 | 0.01 | 0.024 | O | \| | \| | \| | \| | 0.02 |
| 213.750 | 0.00 | 0.01 | 0.024 | O | \| | \| | \| | \| | 0.02 |
| 213.833 | 0.00 | 0.01 | 0.024 | O | \| | \| | \| | \| | 0.02 |
| 213.917 | 0.00 | 0.01 | 0.024 | O | \| | \| | \| | \| | 0.02 |
| 214.000 | 0.00 | 0.01 | 0.024 | O | \| | \| | \| | \| | 0.02 |
| 214.083 | 0.00 | 0.01 | 0.024 | O | \| | \| | \| | \| | 0.02 |
| 214.167 | 0.00 | 0.01 | 0.024 | O | \| | \| | \| | \| | 0.02 |
| 214.250 | 0.00 | 0.01 | 0.024 | O | \| | \| | \| | \| | 0.02 |
| 214.333 | 0.00 | 0.01 | 0.024 | O | \| | \| | \| | \| | 0.02 |
| 214.417 | 0.00 | 0.01 | 0.024 | O | \| | \| | \| | \| | 0.02 |
| 214.500 | 0.00 | 0.01 | 0.024 | O | \| | \| | \| | \| | 0.02 |
| 214.583 | 0.00 | 0.01 | 0.024 | O | \| | \| | \| | \| | 0.02 |
| 214.667 | 0.00 | 0.01 | 0.024 | O | \| | \| | \| | \| | 0.02 |
| 214.750 | 0.00 | 0.01 | 0.024 | O | \| | \| | \| | \| | 0.02 |
| 214.833 | 0.00 | 0.01 | 0.024 | O | \| | \| | \| | \| | 0.02 |
| 214.917 | 0.00 | 0.01 | 0.024 | O | \| | \| | \| | \| | 0.02 |
| 215.000 | 0.00 | 0.01 | 0.024 | O | \| | \| | \| | \| | 0.02 |
| 215.083 | 0.00 | 0.01 | 0.024 | O | \| | \| | \| | \| | 0.02 |
| 215.167 | 0.00 | 0.01 | 0.024 | O | \| | \| | \| | \| | 0.02 |
| 215.250 | 0.00 | 0.01 | 0.024 | O | \| | \| | \| | \| | 0.02 |
| 215.333 | 0.00 | 0.01 | 0.024 | O | \| | \| | \| | \| | 0.02 |
| 215.417 | 0.00 | 0.01 | 0.023 | O | \| | \| | \| | \| | 0.02 |
| 215.500 | 0.00 | 0.01 | 0.023 | O | \| | \| | \| | \| | 0.02 |
| 215.583 | 0.00 | 0.01 | 0.023 | O | \| | \| | \| | \| | 0.02 |
| 215.667 | 0.00 | 0.01 | 0.023 | O | \| | \| | \| | \| | 0.02 |
| 215.750 | 0.00 | 0.01 | 0.023 | O | \| | \| | \| | \| | 0.02 |
| 215.833 | 0.00 | 0.01 | 0.023 | O | \| | \| | \| | \| | 0.02 |
| 215.917 | 0.00 | 0.01 | 0.023 | O | \| | \| | \| | \| | 0.02 |
| 216.000 | 0.00 | 0.01 | 0.023 | O | \| | \| | \| | \| | 0.02 |
| 216.083 | 0.00 | 0.01 | 0.023 | O | \| | \| | \| | \| | 0.02 |
| 216.167 | 0.00 | 0.01 | 0.023 | O | \| | \| | \| | \| | 0.02 |
| 216.250 | 0.00 | 0.01 | 0.023 | O | \| | \| | \| | \| | 0.02 |
| 216.333 | 0.00 | 0.01 | 0.023 | O | \| | \| | \| | \| | 0.02 |
| 216.417 | 0.00 | 0.01 | 0.023 | O | \| | \| | \| | \| | 0.02 |
| 216.500 | 0.00 | 0.01 | 0.023 | O | \| | \| | \| | \| | 0.02 |
| 216.583 | 0.00 | 0.01 | 0.023 | O | \| | \| | \| | \| | 0.02 |
| 216.667 | 0.00 | 0.01 | 0.023 | O | \| | \| | \| | \| | 0.02 |
| 216.750 | 0.00 | 0.01 | 0.023 | O | \| | \| | \| | \| | 0.02 |
| 216.833 | 0.00 | 0.01 | 0.023 | O | \| | \| | \| | \| | 0.02 |
| 216.917 | 0.00 | 0.01 | 0.023 | O | \| | \| | \| | \| | 0.02 |
| 217.000 | 0.00 | 0.01 | 0.023 | O | \| | \| | \| | \| | 0.02 |
| 217.083 | 0.00 | 0.01 | 0.023 | O | \| | \| | \| | \| | 0.02 |
| 217.167 | 0.00 | 0.01 | 0.023 | O | \| | \| | \| | \| | 0.02 |
| 217.250 | 0.00 | 0.01 | 0.023 | O | \| | \| | \| | \| | 0.02 |
| 217.333 | 0.00 | 0.01 | 0.022 | O | \| | \| | \| | \| | 0.02 |
| 217.417 | 0.00 | 0.01 | 0.022 | O | \| | \| | \| | \| | 0.02 |
| 217.500 | 0.00 | 0.01 | 0.022 | O | \| | \| | \| | \| | 0.02 |
| 217.583 | 0.00 | 0.01 | 0.022 | O | \| | \| | \| | \| | 0.02 |
| 217.667 | 0.00 | 0.01 | 0.022 | O | \| | \| | \| | \| | 0.02 |
| 217.750 | 0.00 | 0.01 | 0.022 | O | \| | \| | \| | \| | 0.02 |
| 217.833 | 0.00 | 0.01 | 0.022 | O | \| | \| | \| | \| | 0.02 |
| 217.917 | 0.00 | 0.01 | 0.022 | O | \| | \| | \| | \| | 0.02 |
| 218.000 | 0.00 | 0.01 | 0.022 | O | \| | \| | \| | \| | 0.02 |
| 218.083 | 0.00 | 0.01 | 0.022 | O | \| | \| | \| | \| | 0.02 |
| 218.167 | 0.00 | 0.01 | 0.022 | O | \| | \| | \| | \| | 0.02 |
| 218.250 | 0.00 | 0.01 | 0.022 | O | \| | \| | \| | \| | 0.02 |
| 218.333 | 0.00 | 0.01 | 0.022 | O | \| | \| | \| | \| | 0.02 |
| 218.417 | 0.00 | 0.01 | 0.022 | O | \| | \| | \| | \| | 0.02 |
| 218.500 | 0.00 | 0.01 | 0.022 | O | \| | \| | \| | \| | 0.02 |
| 218.583 | 0.00 | 0.01 | 0.022 | O | \| | \| | \| | \| | 0.02 |
| 218.667 | 0.00 | 0.01 | 0.022 | O | \| | \| | \| | \| | 0.02 |
| 218.750 | 0.00 | 0.01 | 0.022 | O | \| | \| | \| | \| | 0.02 |
| 218.833 | 0.00 | 0.01 | 0.022 | O | \| | \| | \| | \| | 0.02 |
| 218.917 | 0.00 | 0.01 | 0.022 | O | \| | \| | \| | \| | 0.02 |
| 219.000 | 0.00 | 0.01 | 0.022 | O | \| | \| | \| | \| | 0.02 |
| 219.083 | 0.00 | 0.01 | 0.022 | O | \| | \| | \| | \| | 0.02 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 219.167 | 0.00 | 0.01 | 0.022 | O | \| | \| | \| | \| | 0.02 |
| 219.250 | 0.00 | 0.01 | 0.021 | O | \| | \| | \| | \| | 0.02 |
| 219.333 | 0.00 | 0.01 | 0.021 | O | \| | \| | \| | \| | 0.02 |
| 219.417 | 0.00 | 0.01 | 0.021 | O | \| | \| | \| | \| | 0.02 |
| 219.500 | 0.00 | 0.01 | 0.021 | O | \| | \| | \| | \| | 0.02 |
| 219.583 | 0.00 | 0.01 | 0.021 | O | \| | \| | \| | \| | 0.02 |
| 219.667 | 0.00 | 0.01 | 0.021 | O | \| | \| | \| | \| | 0.02 |
| 219.750 | 0.00 | 0.01 | 0.021 | O | \| | \| | \| | \| | 0.02 |
| 219.833 | 0.00 | 0.01 | 0.021 | O | \| | \| | \| | \| | 0.02 |
| 219.917 | 0.00 | 0.01 | 0.021 | O | \| | \| | \| | \| | 0.02 |
| 220.000 | 0.00 | 0.01 | 0.021 | O | \| | \| | \| | \| | 0.02 |
| 220.083 | 0.00 | 0.01 | 0.021 | O | \| | \| | \| | \| | 0.02 |
| 220.167 | 0.00 | 0.01 | 0.021 | O | \| | \| | \| | \| | 0.02 |
| 220.250 | 0.00 | 0.01 | 0.021 | O | \| | \| | \| | \| | 0.02 |
| 220.333 | 0.00 | 0.01 | 0.021 | O | \| | \| | \| | \| | 0.02 |
| 220.417 | 0.00 | 0.01 | 0.021 | O | \| | \| | \| | \| | 0.02 |
| 220.500 | 0.00 | 0.01 | 0.021 | O | \| | \| | \| | \| | 0.02 |
| 220.583 | 0.00 | 0.01 | 0.021 | O | \| | \| | \| | \| | 0.02 |
| 220.667 | 0.00 | 0.01 | 0.021 | O | \| | \| | \| | \| | 0.02 |
| 220.750 | 0.00 | 0.01 | 0.021 | O | \| | \| | \| | \| | 0.02 |
| 220.833 | 0.00 | 0.01 | 0.021 | O | \| | \| | \| | \| | 0.02 |
| 220.917 | 0.00 | 0.01 | 0.021 | O | \| | \| | \| | \| | 0.02 |
| 221.000 | 0.00 | 0.01 | 0.021 | O | \| | \| | \| | \| | 0.02 |
| 221.083 | 0.00 | 0.01 | 0.021 | O | \| | \| | \| | \| | 0.02 |
| 221.167 | 0.00 | 0.01 | 0.021 | O | \| | \| | \| | \| | 0.02 |
| 221.250 | 0.00 | 0.01 | 0.021 | O | \| | \| | \| | \| | 0.02 |
| 221.333 | 0.00 | 0.01 | 0.020 | O | \| | \| | \| | \| | 0.02 |
| 221.417 | 0.00 | 0.01 | 0.020 | O | \| | \| | \| | \| | 0.02 |
| 221.500 | 0.00 | 0.01 | 0.020 | O | \| | \| | \| | \| | 0.02 |
| 221.583 | 0.00 | 0.01 | 0.020 | O | \| | \| | \| | \| | 0.02 |
| 221.667 | 0.00 | 0.01 | 0.020 | O | \| | \| | \| | \| | 0.02 |
| 221.750 | 0.00 | 0.01 | 0.020 | O | \| | \| | \| | \| | 0.02 |
| 221.833 | 0.00 | 0.01 | 0.020 | O | \| | \| | \| | \| | 0.02 |
| 221.917 | 0.00 | 0.01 | 0.020 | O | \| | \| | \| | \| | 0.02 |
| 222.000 | 0.00 | 0.01 | 0.020 | O | \| | \| | \| | \| | 0.02 |
| 222.083 | 0.00 | 0.01 | 0.020 | O | \| | \| | \| | \| | 0.02 |
| 222.167 | 0.00 | 0.01 | 0.020 | O | \| | \| | \| | \| | 0.02 |
| 222.250 | 0.00 | 0.01 | 0.020 | O | \| | \| | \| | \| | 0.02 |
| 222.333 | 0.00 | 0.01 | 0.020 | O | \| | \| | \| | \| | 0.02 |
| 222.417 | 0.00 | 0.01 | 0.020 | O | \| | \| | \| | \| | 0.02 |
| 222.500 | 0.00 | 0.01 | 0.020 | O | \| | \| | \| | \| | 0.02 |
| 222.583 | 0.00 | 0.01 | 0.020 | O | \| | \| | \| | \| | 0.02 |
| 222.667 | 0.00 | 0.01 | 0.020 | O | \| | \| | \| | \| | 0.02 |
| 222.750 | 0.00 | 0.01 | 0.020 | O | \| | \| | \| | \| | 0.02 |
| 222.833 | 0.00 | 0.01 | 0.020 | O | \| | \| | \| | \| | 0.02 |
| 222.917 | 0.00 | 0.01 | 0.020 | O | \| | \| | \| | \| | 0.02 |
| 223.000 | 0.00 | 0.01 | 0.020 | O | \| | \| | \| | \| | 0.02 |
| 223.083 | 0.00 | 0.01 | 0.020 | O | \| | \| | \| | \| | 0.02 |
| 223.167 | 0.00 | 0.01 | 0.020 | O | \| | \| | \| | \| | 0.02 |
| 223.250 | 0.00 | 0.01 | 0.020 | O | \| | \| | \| | \| | 0.02 |
| 223.333 | 0.00 | 0.01 | 0.020 | O | \| | \| | \| | \| | 0.02 |
| 223.417 | 0.00 | 0.01 | 0.020 | O | \| | \| | \| | \| | 0.02 |
| 223.500 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.02 |
| 223.583 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.02 |
| 223.667 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.02 |
| 223.750 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.02 |
| 223.833 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.02 |
| 223.917 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.02 |
| 224.000 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.02 |
| 224.083 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.02 |
| 224.167 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.02 |
| 224.250 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.02 |
| 224.333 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.02 |
| 224.417 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.02 |
| 224.500 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.02 |
| 224.583 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.02 |
| 224.667 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.02 |
| 224.750 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.02 |
| 224.833 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.02 |
| 224.917 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.02 |
| 225.000 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.02 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 225.083 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.02 |
| 225.167 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.02 |
| 225.250 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.02 |
| 225.333 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.02 |
| 225.417 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.02 |
| 225.500 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.02 |
| 225.583 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.02 |
| 225.667 | 0.00 | 0.01 | 0.019 | O | \| | \| | \| | \| | 0.02 |
| 225.750 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.02 |
| 225.833 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.01 |
| 225.917 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.01 |
| 226.000 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.01 |
| 226.083 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.01 |
| 226.167 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.01 |
| 226.250 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.01 |
| 226.333 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.01 |
| 226.417 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.01 |
| 226.500 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.01 |
| 226.583 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.01 |
| 226.667 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.01 |
| 226.750 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.01 |
| 226.833 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.01 |
| 226.917 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.01 |
| 227.000 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.01 |
| 227.083 | 0.00 | 0.01 | 0.018 | O | \| | \| | \| | \| | 0.01 |
| 227.167 | 0.00 | 0.00 | 0.018 | O | \| | \| | \| | \| | 0.01 |
| 227.250 | 0.00 | 0.00 | 0.018 | O | \| | \| | \| | \| | 0.01 |
| 227.333 | 0.00 | 0.00 | 0.018 | O | \| | \| | \| | \| | 0.01 |
| 227.417 | 0.00 | 0.00 | 0.018 | O | \| | \| | \| | \| | 0.01 |
| 227.500 | 0.00 | 0.00 | 0.018 | O | \| | \| | \| | \| | 0.01 |
| 227.583 | 0.00 | 0.00 | 0.018 | O | \| | \| | \| | \| | 0.01 |
| 227.667 | 0.00 | 0.00 | 0.018 | O | \| | \| | \| | \| | 0.01 |
| 227.750 | 0.00 | 0.00 | 0.018 | O | \| | \| | \| | \| | 0.01 |
| 227.833 | 0.00 | 0.00 | 0.018 | O | \| | \| | \| | \| | 0.01 |
| 227.917 | 0.00 | 0.00 | 0.018 | O | \| | \| | \| | \| | 0.01 |
| 228.000 | 0.00 | 0.00 | 0.018 | O | \| | \| | \| | \| | 0.01 |
| 228.083 | 0.00 | 0.00 | 0.018 | O | \| | \| | \| | \| | 0.01 |
| 228.167 | 0.00 | 0.00 | 0.017 | O | \| | \| | \| | \| | 0.01 |
| 228.250 | 0.00 | 0.00 | 0.017 | O | \| | \| | \| | \| | 0.01 |
| 228.333 | 0.00 | 0.00 | 0.017 | O | \| | \| | \| | \| | 0.01 |
| 228.417 | 0.00 | 0.00 | 0.017 | O | \| | \| | \| | \| | 0.01 |
| 228.500 | 0.00 | 0.00 | 0.017 | O | \| | \| | \| | \| | 0.01 |
| 228.583 | 0.00 | 0.00 | 0.017 | O | \| | \| | \| | \| | 0.01 |
| 228.667 | 0.00 | 0.00 | 0.017 | O | \| | \| | \| | \| | 0.01 |
| 228.750 | 0.00 | 0.00 | 0.017 | O | \| | \| | \| | \| | 0.01 |
| 228.833 | 0.00 | 0.00 | 0.017 | O | \| | \| | \| | \| | 0.01 |
| 228.917 | 0.00 | 0.00 | 0.017 | O | \| | \| | \| | \| | 0.01 |
| 229.000 | 0.00 | 0.00 | 0.017 | O | \| | \| | \| | \| | 0.01 |
| 229.083 | 0.00 | 0.00 | 0.017 | O | \| | \| | \| | \| | 0.01 |
| 229.167 | 0.00 | 0.00 | 0.017 | O | \| | \| | \| | \| | 0.01 |
| 229.250 | 0.00 | 0.00 | 0.017 | O | \| | \| | \| | \| | 0.01 |
| 229.333 | 0.00 | 0.00 | 0.017 | O | \| | \| | \| | \| | 0.01 |
| 229.417 | 0.00 | 0.00 | 0.017 | O | \| | \| | \| | \| | 0.01 |
| 229.500 | 0.00 | 0.00 | 0.017 | O | \| | \| | \| | \| | 0.01 |
| 229.583 | 0.00 | 0.00 | 0.017 | O | \| | \| | \| | \| | 0.01 |
| 229.667 | 0.00 | 0.00 | 0.017 | O | \| | \| | \| | \| | 0.01 |
| 229.750 | 0.00 | 0.00 | 0.017 | O | \| | \| | \| | \| | 0.01 |
| 229.833 | 0.00 | 0.00 | 0.017 | O | \| | \| | \| | \| | 0.01 |
| 229.917 | 0.00 | 0.00 | 0.017 | O | \| | \| | \| | \| | 0.01 |
| 230.000 | 0.00 | 0.00 | 0.017 | O | \| | \| | \| | \| | 0.01 |
| 230.083 | 0.00 | 0.00 | 0.017 | O | \| | \| | \| | \| | 0.01 |
| 230.167 | 0.00 | 0.00 | 0.017 | O | \| | \| | \| | \| | 0.01 |
| 230.250 | 0.00 | 0.00 | 0.017 | O | \| | \| | \| | \| | 0.01 |
| 230.333 | 0.00 | 0.00 | 0.017 | O | \| | \| | \| | \| | 0.01 |
| 230.417 | 0.00 | 0.00 | 0.017 | O | \| | \| | \| | \| | 0.01 |
| 230.500 | 0.00 | 0.00 | 0.017 | O | \| | \| | \| | \| | 0.01 |
| 230.583 | 0.00 | 0.00 | 0.017 | O | \| | \| | \| | \| | 0.01 |
| 230.667 | 0.00 | 0.00 | 0.017 | O | \| | \| | \| | \| | 0.01 |
| 230.750 | 0.00 | 0.00 | 0.016 | O | \| | \| | \| | \| | 0.01 |
| 230.833 | 0.00 | 0.00 | 0.016 | O | \| | \| | \| | \| | 0.01 |
| 230.917 | 0.00 | 0.00 | 0.016 | O | \| | \| | \| | \| | 0.01 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 231.000 | 0.00 | 0.00 | 0.016 | O | \| | \| | \| | \| | 0.01 |
| 231.083 | 0.00 | 0.00 | 0.016 | O | \| | \| | \| | \| | 0.01 |
| 231.167 | 0.00 | 0.00 | 0.016 | O | \| | \| | \| | \| | 0.01 |
| 231.250 | 0.00 | 0.00 | 0.016 | O | \| | \| | \| | \| | 0.01 |
| 231.333 | 0.00 | 0.00 | 0.016 | O | \| | \| | \| | \| | 0.01 |
| 231.417 | 0.00 | 0.00 | 0.016 | O | \| | \| | \| | \| | 0.01 |
| 231.500 | 0.00 | 0.00 | 0.016 | O | \| | \| | \| | \| | 0.01 |
| 231.583 | 0.00 | 0.00 | 0.016 | O | \| | \| | \| | \| | 0.01 |
| 231.667 | 0.00 | 0.00 | 0.016 | O | \| | \| | \| | \| | 0.01 |
| 231.750 | 0.00 | 0.00 | 0.016 | O | \| | \| | \| | \| | 0.01 |
| 231.833 | 0.00 | 0.00 | 0.016 | O | \| | \| | \| | \| | 0.01 |
| 231.917 | 0.00 | 0.00 | 0.016 | O | \| | \| | \| | \| | 0.01 |
| 232.000 | 0.00 | 0.00 | 0.016 | O | \| | \| | \| | \| | 0.01 |
| 232.083 | 0.00 | 0.00 | 0.016 | O | \| | \| | \| | \| | 0.01 |
| 232.167 | 0.00 | 0.00 | 0.016 | O | \| | \| | \| | \| | 0.01 |
| 232.250 | 0.00 | 0.00 | 0.016 | O | \| | \| | \| | \| | 0.01 |
| 232.333 | 0.00 | 0.00 | 0.016 | O | \| | \| | \| | \| | 0.01 |
| 232.417 | 0.00 | 0.00 | 0.016 | O | \| | \| | \| | \| | 0.01 |
| 232.500 | 0.00 | 0.00 | 0.016 | O | \| | \| | \| | \| | 0.01 |
| 232.583 | 0.00 | 0.00 | 0.016 | O | \| | \| | \| | \| | 0.01 |
| 232.667 | 0.00 | 0.00 | 0.016 | O | \| | \| | \| | \| | 0.01 |
| 232.750 | 0.00 | 0.00 | 0.016 | O | \| | \| | \| | \| | 0.01 |
| 232.833 | 0.00 | 0.00 | 0.016 | O | \| | \| | \| | \| | 0.01 |
| 232.917 | 0.00 | 0.00 | 0.016 | O | \| | \| | \| | \| | 0.01 |
| 233.000 | 0.00 | 0.00 | 0.016 | O | \| | \| | \| | \| | 0.01 |
| 233.083 | 0.00 | 0.00 | 0.016 | O | \| | \| | \| | \| | 0.01 |
| 233.167 | 0.00 | 0.00 | 0.016 | O | \| | \| | \| | \| | 0.01 |
| 233.250 | 0.00 | 0.00 | 0.016 | O | \| | \| | \| | \| | 0.01 |
| 233.333 | 0.00 | 0.00 | 0.016 | O | \| | \| | \| | \| | 0.01 |
| 233.417 | 0.00 | 0.00 | 0.015 | O | \| | \| | \| | \| | 0.01 |
| 233.500 | 0.00 | 0.00 | 0.015 | O | \| | \| | \| | \| | 0.01 |
| 233.583 | 0.00 | 0.00 | 0.015 | O | \| | \| | \| | \| | 0.01 |
| 233.667 | 0.00 | 0.00 | 0.015 | O | \| | \| | \| | \| | 0.01 |
| 233.750 | 0.00 | 0.00 | 0.015 | O | \| | \| | \| | \| | 0.01 |
| 233.833 | 0.00 | 0.00 | 0.015 | O | \| | \| | \| | \| | 0.01 |
| 233.917 | 0.00 | 0.00 | 0.015 | O | \| | \| | \| | \| | 0.01 |
| 234.000 | 0.00 | 0.00 | 0.015 | O | \| | \| | \| | \| | 0.01 |
| 234.083 | 0.00 | 0.00 | 0.015 | O | \| | \| | \| | \| | 0.01 |
| 234.167 | 0.00 | 0.00 | 0.015 | O | \| | \| | \| | \| | 0.01 |
| 234.250 | 0.00 | 0.00 | 0.015 | O | \| | \| | \| | \| | 0.01 |
| 234.333 | 0.00 | 0.00 | 0.015 | O | \| | \| | \| | \| | 0.01 |
| 234.417 | 0.00 | 0.00 | 0.015 | O | \| | \| | \| | \| | 0.01 |
| 234.500 | 0.00 | 0.00 | 0.015 | O | \| | \| | \| | \| | 0.01 |
| 234.583 | 0.00 | 0.00 | 0.015 | O | \| | \| | \| | \| | 0.01 |
| 234.667 | 0.00 | 0.00 | 0.015 | O | \| | \| | \| | \| | 0.01 |
| 234.750 | 0.00 | 0.00 | 0.015 | O | \| | \| | \| | \| | 0.01 |
| 234.833 | 0.00 | 0.00 | 0.015 | O | \| | \| | \| | \| | 0.01 |
| 234.917 | 0.00 | 0.00 | 0.015 | O | \| | \| | \| | \| | 0.01 |
| 235.000 | 0.00 | 0.00 | 0.015 | O | \| | \| | \| | \| | 0.01 |
| 235.083 | 0.00 | 0.00 | 0.015 | O | \| | \| | \| | \| | 0.01 |
| 235.167 | 0.00 | 0.00 | 0.015 | O | \| | \| | \| | \| | 0.01 |
| 235.250 | 0.00 | 0.00 | 0.015 | O | \| | \| | \| | \| | 0.01 |
| 235.333 | 0.00 | 0.00 | 0.015 | O | \| | \| | \| | \| | 0.01 |
| 235.417 | 0.00 | 0.00 | 0.015 | O | \| | \| | \| | \| | 0.01 |
| 235.500 | 0.00 | 0.00 | 0.015 | O | \| | \| | \| | \| | 0.01 |
| 235.583 | 0.00 | 0.00 | 0.015 | O | \| | \| | \| | \| | 0.01 |
| 235.667 | 0.00 | 0.00 | 0.015 | O | \| | \| | \| | \| | 0.01 |
| 235.750 | 0.00 | 0.00 | 0.015 | O | \| | \| | \| | \| | 0.01 |
| 235.833 | 0.00 | 0.00 | 0.015 | O | \| | \| | \| | \| | 0.01 |
| 235.917 | 0.00 | 0.00 | 0.015 | O | \| | \| | \| | \| | 0.01 |
| 236.000 | 0.00 | 0.00 | 0.015 | O | \| | \| | \| | \| | 0.01 |
| 236.083 | 0.00 | 0.00 | 0.015 | O | \| | \| | \| | \| | 0.01 |
| 236.167 | 0.00 | 0.00 | 0.015 | O | \| | \| | \| | \| | 0.01 |
| 236.250 | 0.00 | 0.00 | 0.015 | O | \| | \| | \| | \| | 0.01 |
| 236.333 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.01 |
| 236.417 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.01 |
| 236.500 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.01 |
| 236.583 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.01 |
| 236.667 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.01 |
| 236.750 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.01 |
| 236.833 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.01 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 236.917 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.01 |
| 237.000 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.01 |
| 237.083 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.01 |
| 237.167 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.01 |
| 237.250 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.01 |
| 237.333 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.01 |
| 237.417 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.01 |
| 237.500 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.01 |
| 237.583 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.01 |
| 237.667 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.01 |
| 237.750 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.01 |
| 237.833 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.01 |
| 237.917 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.01 |
| 238.000 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.01 |
| 238.083 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.01 |
| 238.167 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.01 |
| 238.250 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.01 |
| 238.333 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.01 |
| 238.417 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.01 |
| 238.500 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.01 |
| 238.583 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.01 |
| 238.667 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.01 |
| 238.750 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.01 |
| 238.833 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.01 |
| 238.917 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.01 |
| 239.000 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.01 |
| 239.083 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.01 |
| 239.167 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.01 |
| 239.250 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.01 |
| 239.333 | 0.00 | 0.00 | 0.014 | O | \| | \| | \| | \| | 0.01 |
| 239.417 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.01 |
| 239.500 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.01 |
| 239.583 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.01 |
| 239.667 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.01 |
| 239.750 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.01 |
| 239.833 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.01 |
| 239.917 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.01 |
| 240.000 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.01 |
| 240.083 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.01 |
| 240.167 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.01 |
| 240.250 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.01 |
| 240.333 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.01 |
| 240.417 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.01 |
| 240.500 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.01 |
| 240.583 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.01 |
| 240.667 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.01 |
| 240.750 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.01 |
| 240.833 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.01 |
| 240.917 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.01 |
| 241.000 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.01 |
| 241.083 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.01 |
| 241.167 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.01 |
| 241.250 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.01 |
| 241.333 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.01 |
| 241.417 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.01 |
| 241.500 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.01 |
| 241.583 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.01 |
| 241.667 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.01 |
| 241.750 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.01 |
| 241.833 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.01 |
| 241.917 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.01 |
| 242.000 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.01 |
| 242.083 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.01 |
| 242.167 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.01 |
| 242.250 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.01 |
| 242.333 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.01 |
| 242.417 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.01 |
| 242.500 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.01 |
| 242.583 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.01 |
| 242.667 | 0.00 | 0.00 | 0.013 | O | \| | \| | \| | \| | 0.01 |
| 242.750 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.01 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 242.833 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.01 |
| 242.917 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.01 |
| 243.000 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.01 |
| 243.083 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.01 |
| 243.167 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.01 |
| 243.250 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.01 |
| 243.333 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.01 |
| 243.417 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.01 |
| 243.500 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.01 |
| 243.583 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.01 |
| 243.667 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.01 |
| 243.750 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.01 |
| 243.833 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.01 |
| 243.917 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.01 |
| 244.000 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.01 |
| 244.083 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.01 |
| 244.167 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.01 |
| 244.250 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.01 |
| 244.333 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.01 |
| 244.417 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.01 |
| 244.500 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.01 |
| 244.583 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.01 |
| 244.667 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.01 |
| 244.750 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.01 |
| 244.833 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.01 |
| 244.917 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.01 |
| 245.000 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.01 |
| 245.083 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.01 |
| 245.167 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.01 |
| 245.250 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.01 |
| 245.333 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.01 |
| 245.417 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.01 |
| 245.500 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.01 |
| 245.583 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.01 |
| 245.667 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.01 |
| 245.750 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.01 |
| 245.833 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.01 |
| 245.917 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.01 |
| 246.000 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.01 |
| 246.083 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.01 |
| 246.167 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.01 |
| 246.250 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.01 |
| 246.333 | 0.00 | 0.00 | 0.012 | O | \| | \| | \| | \| | 0.01 |
| 246.417 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.01 |
| 246.500 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.01 |
| 246.583 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.01 |
| 246.667 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.01 |
| 246.750 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.01 |
| 246.833 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.01 |
| 246.917 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.01 |
| 247.000 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.01 |
| 247.083 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.01 |
| 247.167 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.01 |
| 247.250 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.01 |
| 247.333 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.01 |
| 247.417 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.01 |
| 247.500 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.01 |
| 247.583 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.01 |
| 247.667 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.01 |
| 247.750 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.01 |
| 247.833 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.01 |
| 247.917 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.01 |
| 248.000 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.01 |
| 248.083 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.01 |
| 248.167 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.01 |
| 248.250 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.01 |
| 248.333 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.01 |
| 248.417 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.01 |
| 248.500 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.01 |
| 248.583 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.01 |
| 248.667 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.01 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 248.750 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.01 |
| 248.833 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.01 |
| 248.917 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.01 |
| 249.000 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.01 |
| 249.083 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.01 |
| 249.167 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.01 |
| 249.250 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.01 |
| 249.333 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.01 |
| 249.417 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.01 |
| 249.500 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.01 |
| 249.583 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.01 |
| 249.667 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.01 |
| 249.750 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.01 |
| 249.833 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.01 |
| 249.917 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.01 |
| 250.000 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.01 |
| 250.083 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.01 |
| 250.167 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.01 |
| 250.250 | 0.00 | 0.00 | 0.011 | O | \| | \| | \| | \| | 0.01 |
| 250.333 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 250.417 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 250.500 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 250.583 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 250.667 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 250.750 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 250.833 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 250.917 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 251.000 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 251.083 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 251.167 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 251.250 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 251.333 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 251.417 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 251.500 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 251.583 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 251.667 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 251.750 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 251.833 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 251.917 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 252.000 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 252.083 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 252.167 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 252.250 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 252.333 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 252.417 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 252.500 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 252.583 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 252.667 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 252.750 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 252.833 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 252.917 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 253.000 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 253.083 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 253.167 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 253.250 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 253.333 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 253.417 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 253.500 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 253.583 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 253.667 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 253.750 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 253.833 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 253.917 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 254.000 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 254.083 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 254.167 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 254.250 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 254.333 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 254.417 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 254.500 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |
| 254.583 | 0.00 | 0.00 | 0.010 | O | \| | \| | \| | \| | 0.01 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 254.667 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 254.750 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 254.833 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 254.917 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 255.000 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 255.083 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 255.167 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 255.250 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 255.333 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 255.417 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 255.500 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 255.583 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 255.667 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 255.750 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 255.833 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 255.917 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 256.000 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 256.083 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 256.167 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 256.250 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 256.333 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 256.417 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 256.500 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 256.583 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 256.667 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 256.750 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 256.833 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 256.917 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 257.000 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 257.083 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 257.167 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 257.250 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 257.333 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 257.417 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 257.500 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 257.583 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 257.667 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 257.750 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 257.833 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 257.917 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 258.000 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 258.083 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 258.167 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 258.250 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 258.333 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 258.417 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 258.500 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 258.583 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 258.667 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 258.750 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 258.833 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 258.917 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 259.000 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 259.083 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 259.167 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 259.250 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 259.333 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 259.417 | 0.00 | 0.00 | 0.009 | O | \| | \| | \| | \| | 0.01 |
| 259.500 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 259.583 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 259.667 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 259.750 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 259.833 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 259.917 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 260.000 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 260.083 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 260.167 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 260.250 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 260.333 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 260.417 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 260.500 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 260.583 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 260.667 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 260.750 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 260.833 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 260.917 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 261.000 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 261.083 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 261.167 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 261.250 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 261.333 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 261.417 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 261.500 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 261.583 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 261.667 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 261.750 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 261.833 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 261.917 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 262.000 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 262.083 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 262.167 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 262.250 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 262.333 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 262.417 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 262.500 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 262.583 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 262.667 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 262.750 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 262.833 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 262.917 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 263.000 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 263.083 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 263.167 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 263.250 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 263.333 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 263.417 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 263.500 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 263.583 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 263.667 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 263.750 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 263.833 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 263.917 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 264.000 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 264.083 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 264.167 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 264.250 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 264.333 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 264.417 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 264.500 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 264.583 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 264.667 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 264.750 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 264.833 | 0.00 | 0.00 | 0.008 | O | \| | \| | \| | \| | 0.01 |
| 264.917 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 265.000 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 265.083 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 265.167 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 265.250 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 265.333 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 265.417 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 265.500 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 265.583 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 265.667 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 265.750 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 265.833 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 265.917 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 266.000 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 266.083 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 266.167 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 266.250 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 266.333 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 266.417 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 266.500 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 266.583 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 266.667 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 266.750 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 266.833 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 266.917 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 267.000 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 267.083 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 267.167 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 267.250 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 267.333 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 267.417 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 267.500 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 267.583 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 267.667 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 267.750 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 267.833 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 267.917 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 268.000 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 268.083 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 268.167 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 268.250 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 268.333 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 268.417 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 268.500 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 268.583 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 268.667 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 268.750 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 268.833 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 268.917 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 269.000 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 269.083 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 269.167 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 269.250 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 269.333 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 269.417 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 269.500 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 269.583 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 269.667 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 269.750 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 269.833 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 269.917 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 270.000 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 270.083 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 270.167 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 270.250 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 270.333 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 270.417 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 270.500 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 270.583 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 270.667 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 270.750 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 270.833 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 270.917 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 271.000 | 0.00 | 0.00 | 0.007 | O | \| | \| | \| | \| | 0.01 |
| 271.083 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 271.167 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 271.250 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 271.333 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 271.417 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 271.500 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 271.583 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 271.667 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 271.750 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 271.833 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 271.917 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 272.000 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 272.083 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 272.167 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 272.250 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 272.333 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 272.417 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 272.500 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 272.583 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 272.667 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 272.750 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 272.833 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 272.917 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 273.000 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 273.083 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 273.167 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 273.250 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 273.333 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.01 |
| 273.417 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 273.500 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 273.583 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 273.667 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 273.750 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 273.833 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 273.917 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 274.000 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 274.083 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 274.167 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 274.250 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 274.333 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 274.417 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 274.500 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 274.583 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 274.667 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 274.750 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 274.833 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 274.917 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 275.000 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 275.083 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 275.167 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 275.250 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 275.333 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 275.417 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 275.500 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 275.583 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 275.667 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 275.750 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 275.833 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 275.917 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 276.000 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 276.083 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 276.167 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 276.250 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 276.333 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 276.417 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 276.500 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 276.583 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 276.667 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 276.750 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 276.833 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 276.917 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 277.000 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 277.083 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 277.167 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 277.250 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 277.333 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 277.417 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 277.500 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 277.583 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 277.667 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 277.750 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 277.833 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 277.917 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 278.000 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 278.083 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 278.167 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |
| 278.250 | 0.00 | 0.00 | 0.006 | O | \| | \| | \| | \| | 0.00 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 278.333 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 278.417 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 278.500 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 278.583 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 278.667 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 278.750 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 278.833 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 278.917 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 279.000 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 279.083 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 279.167 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 279.250 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 279.333 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 279.417 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 279.500 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 279.583 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 279.667 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 279.750 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 279.833 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 279.917 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 280.000 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 280.083 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 280.167 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 280.250 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 280.333 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 280.417 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 280.500 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 280.583 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 280.667 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 280.750 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 280.833 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 280.917 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 281.000 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 281.083 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 281.167 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 281.250 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 281.333 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 281.417 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 281.500 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 281.583 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 281.667 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 281.750 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 281.833 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 281.917 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 282.000 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 282.083 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 282.167 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 282.250 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 282.333 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 282.417 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 282.500 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 282.583 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 282.667 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 282.750 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 282.833 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 282.917 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 283.000 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 283.083 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 283.167 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 283.250 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 283.333 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 283.417 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 283.500 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 283.583 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 283.667 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 283.750 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 283.833 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 283.917 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 284.000 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 284.083 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 284.167 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 284.250 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 284.333 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 284.417 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 284.500 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 284.583 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 284.667 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 284.750 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 284.833 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 284.917 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 285.000 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 285.083 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 285.167 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 285.250 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 285.333 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 285.417 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 285.500 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 285.583 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 285.667 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 285.750 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 285.833 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 285.917 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 286.000 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 286.083 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 286.167 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 286.250 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 286.333 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 286.417 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 286.500 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 286.583 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 286.667 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 286.750 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 286.833 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 286.917 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 287.000 | 0.00 | 0.00 | 0.005 | O | \| | \| | \| | \| | 0.00 |
| 287.083 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 287.167 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 287.250 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 287.333 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 287.417 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 287.500 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 287.583 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 287.667 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 287.750 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 287.833 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 287.917 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 288.000 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 288.083 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 288.167 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 288.250 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 288.333 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 288.417 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 288.500 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 288.583 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 288.667 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 288.750 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 288.833 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 288.917 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 289.000 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 289.083 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 289.167 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 289.250 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 289.333 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 289.417 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 289.500 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 289.583 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 289.667 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 289.750 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 289.833 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 289.917 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 290.000 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 290.083 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 290.167 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 290.250 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 290.333 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 290.417 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 290.500 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 290.583 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 290.667 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 290.750 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 290.833 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 290.917 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 291.000 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 291.083 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 291.167 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 291.250 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 291.333 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 291.417 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 291.500 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 291.583 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 291.667 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 291.750 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 291.833 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 291.917 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 292.000 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 292.083 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 292.167 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 292.250 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 292.333 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 292.417 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 292.500 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 292.583 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 292.667 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 292.750 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 292.833 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 292.917 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 293.000 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 293.083 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 293.167 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 293.250 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 293.333 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 293.417 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 293.500 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 293.583 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 293.667 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 293.750 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 293.833 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 293.917 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 294.000 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 294.083 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 294.167 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 294.250 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 294.333 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 294.417 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 294.500 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 294.583 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 294.667 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 294.750 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 294.833 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 294.917 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 295.000 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 295.083 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 295.167 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 295.250 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 295.333 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 295.417 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 295.500 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 295.583 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 295.667 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 295.750 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 295.833 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 295.917 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |
| 296.000 | 0.00 | 0.00 | 0.004 | O | \| | \| | \| | \| | 0.00 |

```
296.083    0.00    0.00      0.004  O       |       |       |       |     0.00
296.167    0.00    0.00      0.004  O       |       |       |       |     0.00
296.250    0.00    0.00      0.004  O       |       |       |       |     0.00
296.333    0.00    0.00      0.004  O       |       |       |       |     0.00
296.417    0.00    0.00      0.004  O       |       |       |       |     0.00
296.500    0.00    0.00      0.004  O       |       |       |       |     0.00
296.583    0.00    0.00      0.004  O       |       |       |       |     0.00
296.667    0.00    0.00      0.004  O       |       |       |       |     0.00
296.750    0.00    0.00      0.004  O       |       |       |       |     0.00
296.833    0.00    0.00      0.004  O       |       |       |       |     0.00
296.917    0.00    0.00      0.004  O       |       |       |       |     0.00

        Remaining water in basin =    0.00 (Ac.Ft)


        ****************************HYDROGRAPH DATA****************************
                      Number of intervals =  3563
                      Time interval =    5.0 (Min.)
                      Maximum/Peak flow rate =        0.266 (CFS)
                      Total volume =       1.821 (Ac.Ft)
               Status of hydrographs being held in storage
                           Stream 1  Stream 2  Stream 3  Stream 4  Stream 5
               Peak (CFS)      0.000     0.000     0.000     0.000     0.000
               Vol (Ac.Ft)     0.000     0.000     0.000     0.000     0.000
        ***********************************************************************

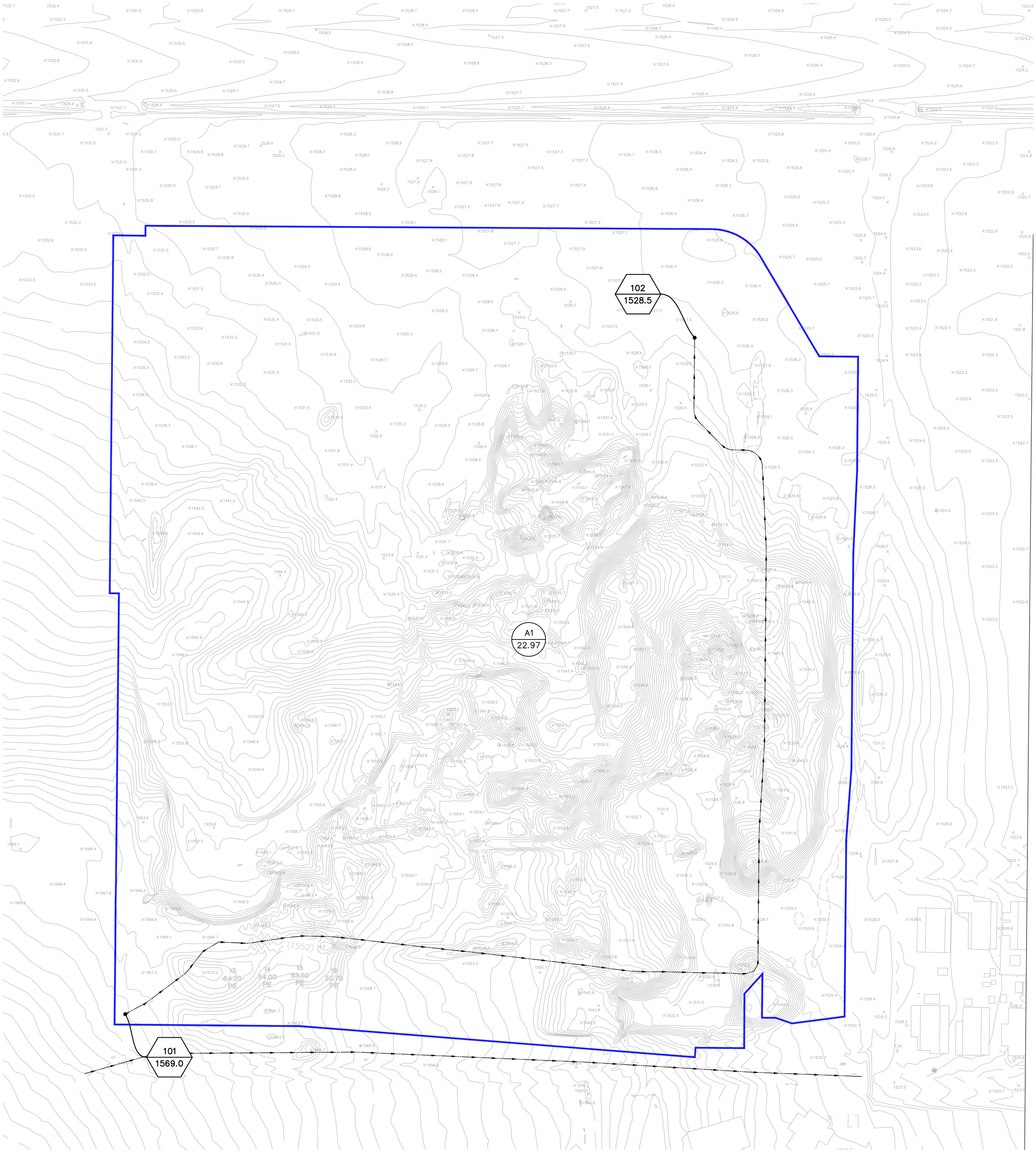
        -----------------------------------------------------------------
```

## *PRE-PROJECT UNIT HYDROGRAPH MAP*

# TENTATIVE TRACT MAP 37737

COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

# EXISTING CONDITION UNIT HYDROGRAPH MAP




LEGEND:

| | |
|---|---|
| X.X / X.X | NODE/CONCENTRATION POINT / FLOWLINE ELEVATION |
| XXXX.X | APPROXIMATE INVERT ELEVATION |
| XXX / X.X | SUB AREA / ACRES |
| L=XXX' | FLOW DISTANCE |
| | FLOW PATH |
| | WATERSHED BOUNDARY |

N

GRAPHIC SCALE

60' 0 30' 60' 120'

1" = 60'

EXHIBIT "C"

TTM 37737

EXISTING CONDITION
UNIT HYDROGRAPH MAP


JLC Engineering & Consulting, Inc.

41660 IVY STREET, SUITE A
MURRIETA, CA 92562
PH. 951.304.9552 FAX 951.304.3568

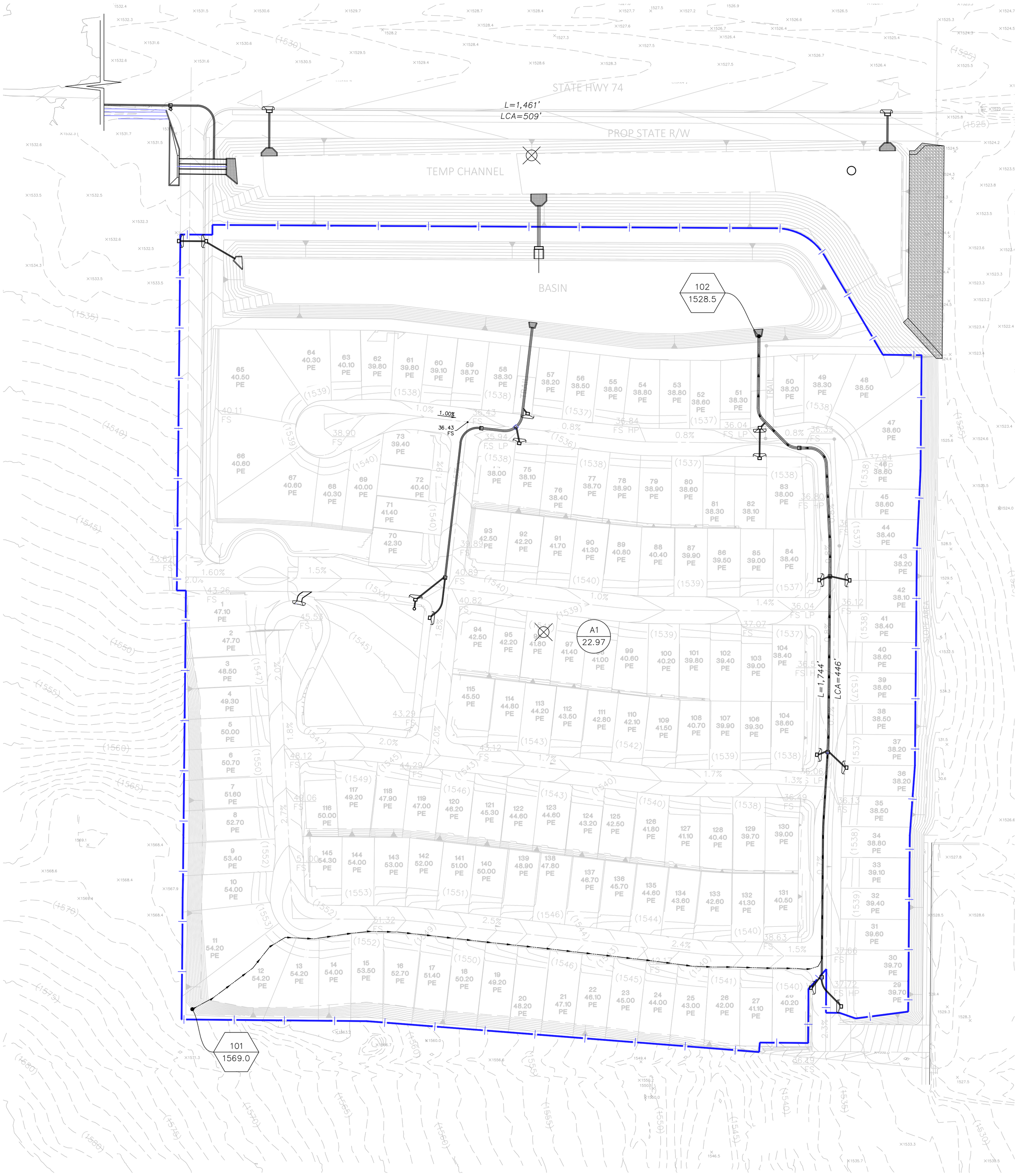

Drawing Name: O:\150.10.19\Engineering\Hydrology Plan\Exhibits\EXIST UH ONSITE.dwg
Last Opened: Nov 03, 2021 – 8:56am by jcarver

## *POST-PROJECT UNIT HYDROGRAPH MAP*

# TENTATIVE TRACT MAP 37737

COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

# POST-PROJECT CONDITION SITE HYDROLOGY MAP




LEGEND:

- X.X / X.X — NODE/CONCENTRATION POINT / FLOWLINE ELEVATION
- XXXX.X — APPROXIMATE INVERT ELEVATION
- XXX / X.X — SUB AREA / ACRES
- L=XXX' — FLOW DISTANCE
- FLOW PATH
- WATERSHED SUB-BOUNDARY
- AREA CENTROID

N

GRAPHIC SCALE
60' 0 30' 60' 120'
1" = 60'


JLC Engineering & Consulting, Inc.
41660 IVY STREET, SUITE A
MURRIETA, CA 92562
PH. 951.304.9552 FAX 951.304.3568


EXHIBIT "D"

TTM 37737

POST-PROJECT CONDITION SITE HYDROLOGY MAP


Drawing Name: O:\150.10.19\Engineering\Hydrology Plan\Exhibits\Onsite and Offsite UH Hydrology.dwg
Last Opened: Nov 03, 2021 - 9:05am by jcarver

# Appendix 8:  Source Control

*Pollutant Sources/Source Control Checklist*

# STORMWATER POLLUTANT SOURCES/SOURCE CONTROL CHECKLIST

How to use this worksheet (also see instructions in Section G of the WQMP Template):

1. Review Column 1 and identify which of these potential sources of stormwater pollutants apply to your site. Check each box that applies.
2. Review Column 2 and incorporate all of the corresponding applicable BMPs in your WQMP Exhibit.
3. Review Columns 3 and 4 and incorporate all of the corresponding applicable permanent controls and operational BMPs in your WQMP. Use the format shown in Table G.1on page 23 of this WQMP Template. Describe your specific BMPs in an accompanying narrative, and explain any special conditions or situations that required omitting BMPs or substituting alternative BMPs for those shown here.

| IF THESE SOURCES WILL BE ON THE PROJECT SITE … | … THEN YOUR WQMP SHOULD INCLUDE THESE SOURCE CONTROL BMPs, AS APPLICABLE | | |
|---|---|---|---|
| 1<br>Potential Sources of Runoff Pollutants | 2<br>Permanent Controls—Show on WQMP Drawings | 3<br>Permanent Controls—List in WQMP Table and Narrative | 4<br>Operational BMPs—Include in WQMP Table and Narrative |
| ☒ A. **On-site storm drain inlets** | ☒ **Locations of inlets.** | ☒ **Mark all inlets with the words "Only Rain Down the Storm Drain" or similar. Catch Basin Markers may be available from the Riverside County Flood Control and Water Conservation District, call 951.955.1200 to verify.** | ☒ **Maintain and periodically repaint or replace inlet markings.**<br>☒ **Provide stormwater pollution prevention information to new site owners, lessees, or operators.**<br>☒ **See applicable operational BMPs in Fact Sheet SC-44, "Drainage System Maintenance," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com**<br>☒ **Include the following in lease agreements: "Tenant shall not allow anyone to discharge anything to storm drains or to store or deposit materials so as to create a potential discharge to storm drains."** |
| ❑ B. **Interior floor drains and elevator shaft sump pumps** | | ❑ **State that interior floor drains and elevator shaft sump pumps will be plumbed to sanitary sewer.** | ❑ **Inspect and maintain drains to prevent blockages and overflow.** |
| ❑ C. **Interior parking garages** | | ❑ **State that parking garage floor drains will be plumbed to the sanitary sewer.** | ❑ **Inspect and maintain drains to prevent blockages and overflow.** |

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| ❑ D1. **Need for future indoor & structural pest control** | | ❑ **Note building design features that discourage entry of pests.** | ❑ **Provide Integrated Pest Management information to owners, lessees, and operators.** |
| ☒ D2. **Landscape/ Outdoor Pesticide Use** | ❑ **Show locations of native trees or areas of shrubs and ground cover to be undisturbed and retained.**<br>❑ **Show self-retaining landscape areas, if any.**<br>☒ **Show stormwater treatment and hydrograph modification management BMPs. (See instructions in Chapter 3, Step 5 and guidance in Chapter 5.)** | **State that final landscape plans will accomplish all of the following.**<br>☒ **Preserve existing native trees, shrubs, and ground cover to the maximum extent possible.**<br>☒ **Design landscaping to minimize irrigation and runoff, to promote surface infiltration where appropriate, and to minimize the use of fertilizers and pesticides that can contribute to stormwater pollution.**<br>☒ **Where landscaped areas are used to retain or detain stormwater, specify plants that are tolerant of saturated soil conditions.**<br>☒ **Consider using pest-resistant plants, especially adjacent to hardscape.**<br>☒ **To insure successful establishment, select plants appropriate to site soils, slopes, climate, sun, wind, rain, land use, air movement, ecological consistency, and plant interactions.** | ☒ **Maintain landscaping using minimum or no pesticides.**<br>☒ **See applicable operational BMPs in "What you should know for…..Landscape and Gardening"** at http://rcflood.org/stormwater/**Error! Hyperlink reference not valid.**<br>☒ **Provide IPM information to new owners, lessees and operators.** |

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| ☒ E. **Pools, spas, ponds, decorative fountains, and other water features.** | ❑ **Show location of water feature and a sanitary sewer cleanout in an accessible area within 10 feet. (Exception: Public pools must be plumbed according to County Department of Environmental Health Guidelines.)** | **If the Co-Permittee requires pools to be plumbed to the sanitary sewer, place a note on the plans and state in the narrative that this connection will be made according to local requirements.** | ☒ **See applicable operational BMPs in "**Guidelines for Maintaining Your Swimming Pool, Jacuzzi and Garden Fountain" at http://rcflood.org/stormwater/ |
| ❑ F. **Food service** | ❑ **For restaurants, grocery stores, and other food service operations, show location (indoors or in a covered area outdoors) of a floor sink or other area for cleaning floor mats, containers, and equipment.**<br>❑ **On the drawing, show a note that this drain will be connected to a grease interceptor before discharging to the sanitary sewer.** | ❑ **Describe the location and features of the designated cleaning area.**<br>❑ **Describe the items to be cleaned in this facility and how it has been sized to insure that the largest items can be accommodated.** | ❑ **See the brochure, "**The Food Service Industry Best Management Practices for: Restaurants, Grocery Stores, Delicatessens and Bakeries" at http://rcflood.org/stormwater/<br>**Provide this brochure to new site owners, lessees, and operators.** |
| ☒ G. **Refuse areas** | ❑ **Show where site refuse and recycled materials will be handled and stored for pickup. See local municipal requirements for sizes and other details of refuse areas.**<br>❑ **If dumpsters or other receptacles are outdoors, show how the designated area will be covered, graded, and paved to prevent run-on and show locations of berms to prevent runoff from the area.**<br>❑ **Any drains from dumpsters, compactors, and tallow bin areas shall be connected to a grease removal device before discharge to sanitary sewer.** | ☒ **State how site refuse will be handled and provide supporting detail to what is shown on plans.**<br>☒ **State that signs will be posted on or near dumpsters with the words "Do not dump hazardous materials here" or similar.** | ☒ **State how the following will be implemented:**<br>**Provide adequate number of receptacles. Inspect receptacles regularly; repair or replace leaky receptacles. Keep receptacles covered. Prohibit/prevent dumping of liquid or hazardous wastes. Post "no hazardous materials" signs. Inspect and pick up litter daily and clean up spills immediately. Keep spill control materials available on-site. See Fact Sheet SC-34, "Waste Handling and Disposal" in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com** |

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| ❑ H. **Industrial processes.** | ❑ **Show process area.** | ❑ **If industrial processes are to be located on site, state: "All process activities to be performed indoors. No processes to drain to exterior or to storm drain system."** | ❑ **See Fact Sheet SC-10, "Non-Stormwater Discharges" in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com**<br>See the brochure "Industrial & Commercial Facilities Best Management Practices for: Industrial, Commercial Facilities" at http://rcflood.org/stormwater/ |

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| ❑ I. **Outdoor storage of equipment or materials. (See rows J and K for source control measures for vehicle cleaning, repair, and maintenance.)** | ❑ **Show any outdoor storage areas, including how materials will be covered. Show how areas will be graded and bermed to prevent run-on or run-off from area.**<br>❑ **Storage of non-hazardous liquids shall be covered by a roof and/or drain to the sanitary sewer system, and be contained by berms, dikes, liners, or vaults.**<br>❑ **Storage of hazardous materials and wastes must be in compliance with the local hazardous materials ordinance and a Hazardous Materials Management Plan for the site.** | **Include a detailed description of materials to be stored, storage areas, and structural features to prevent pollutants from entering storm drains.**<br>**Where appropriate, reference documentation of compliance with the requirements of Hazardous Materials Programs for:**<br>▪ **Hazardous Waste Generation**<br>▪ **Hazardous Materials Release Response and Inventory**<br>▪ **California Accidental Release (CalARP)**<br>▪ **Aboveground Storage Tank**<br>▪ **Uniform Fire Code Article 80 Section 103(b) & (c) 1991**<br>▪ **Underground Storage Tank**<br>www.cchealth.org/groups/hazmat/ | ❑ **See the Fact Sheets SC-31, "Outdoor Liquid Container Storage" and SC-33, "Outdoor Storage of Raw Materials " in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com** |

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| ❑ J. **Vehicle and Equipment Cleaning** | ❑ **Show on drawings as appropriate:**<br>**(1) Commercial/industrial facilities having vehicle/equipment cleaning needs shall either provide a covered, bermed area for washing activities or discourage vehicle/equipment washing by removing hose bibs and installing signs prohibiting such uses.**<br>**(2) Multi-dwelling complexes shall have a paved, bermed, and covered car wash area (unless car washing is prohibited on-site and hoses are provided with an automatic shut-off to discourage such use).**<br>**(3) Washing areas for cars, vehicles, and equipment shall be paved, designed to prevent run-on to or runoff from the area, and plumbed to drain to the sanitary sewer.**<br>**(4) Commercial car wash facilities shall be designed such that no runoff from the facility is discharged to the storm drain system. Wastewater from the facility shall discharge to the sanitary sewer, or a wastewater reclamation system shall be installed.** | ❑ **If a car wash area is not provided, describe any measures taken to discourage on-site car washing and explain how these will be enforced.** | **Describe operational measures to implement the following (if applicable):**<br>❑ **Washwater from vehicle and equipment washing operations shall not be discharged to the storm drain system.** Refer to "Outdoor Cleaning Activities and Professional Mobile Service Providers" for many of the Potential Sources of Runoff Pollutants categories below. Brochure can be found at http://rcflood.org/stormwater/<br>❑**Car dealerships and similar may rinse cars with water only.** |

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| ❑ K. **Vehicle/Equipment Repair and Maintenance** | ❑ **Accommodate all vehicle equipment repair and maintenance indoors. Or designate an outdoor work area and design the area to prevent run-on and runoff of stormwater.**<br>❑ **Show secondary containment for exterior work areas where motor oil, brake fluid, gasoline, diesel fuel, radiator fluid, acid-containing batteries or other hazardous materials or hazardous wastes are used or stored. Drains shall not be installed within the secondary containment areas.**<br>❑ **Add a note on the plans that states either (1) there are no floor drains, or (2) floor drains are connected to wastewater pretreatment systems prior to discharge to the sanitary sewer and an industrial waste discharge permit will be obtained.** | ❑ **State that no vehicle repair or maintenance will be done outdoors, or else describe the required features of the outdoor work area.**<br>❑ **State that there are no floor drains or if there are floor drains, note the agency from which an industrial waste discharge permit will be obtained and that the design meets that agency's requirements.**<br>❑ **State that there are no tanks, containers or sinks to be used for parts cleaning or rinsing or, if there are, note the agency from which an industrial waste discharge permit will be obtained and that the design meets that agency's requirements.** | **In the Stormwater Control Plan, note that all of the following restrictions apply to use the site:**<br>❑ **No person shall dispose of, nor permit the disposal, directly or indirectly of vehicle fluids, hazardous materials, or rinsewater from parts cleaning into storm drains.**<br>❑ **No vehicle fluid removal shall be performed outside a building, nor on asphalt or ground surfaces, whether inside or outside a building, except in such a manner as to ensure that any spilled fluid will be in an area of secondary containment. Leaking vehicle fluids shall be contained or drained from the vehicle immediately.**<br>❑ **No person shall leave unattended drip parts or other open containers containing vehicle fluid, unless such containers are in use or in an area of secondary containment.**<br>Refer to "Automotive Maintenance & Car Care Best Management Practices for Auto Body Shops, Auto Repair Shops, Car Dealerships, Gas Stations and Fleet Service Operations". Brochure can be found at http://rcflood.org/stormwater/<br>Refer to Outdoor Cleaning Activities and Professional Mobile Service Providers for many of the Potential Sources of Runoff Pollutants categories below. Brochure can be found at http://rcflood.org/stormwater/ |

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| ❑ L. **Fuel Dispensing Areas** | ❑ **Fueling areas[6] shall have impermeable floors (i.e., portland cement concrete or equivalent smooth impervious surface) that are: a) graded at the minimum slope necessary to prevent ponding; and b) separated from the rest of the site by a grade break that prevents run-on of stormwater to the maximum extent practicable.**<br>❑ **Fueling areas shall be covered by a canopy that extends a minimum of ten feet in each direction from each pump. [Alternative: The fueling area must be covered and the cover's minimum dimensions must be equal to or greater than the area within the grade break or fuel dispensing area[1].] The canopy [or cover] shall not drain onto the fueling area.** | | ❑ **The property owner shall dry sweep the fueling area routinely.**<br>❑ **See the Fact Sheet SD-30 , "Fueling Areas" in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com** |

[6] **The fueling area shall be defined as the area extending a minimum of 6.5 feet from the corner of each fuel dispenser or the length at which the hose and nozzle assembly may be operated plus a minimum of one foot, whichever is greater.**

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| ❑ M. **Loading Docks** | ❑ **Show a preliminary design for the loading dock area, including roofing and drainage. Loading docks shall be covered and/or graded to minimize run-on to and runoff from the loading area. Roof downspouts shall be positioned to direct stormwater away from the loading area. Water from loading dock areas shall be drained to the sanitary sewer, or diverted and collected for ultimate discharge to the sanitary sewer.**<br>❑ **Loading dock areas draining directly to the sanitary sewer shall be equipped with a spill control valve or equivalent device, which shall be kept closed during periods of operation.**<br>❑ **Provide a roof overhang over the loading area or install door skirts (cowling) at each bay that enclose the end of the trailer.** | | ❑ **Move loaded and unloaded items indoors as soon as possible.**<br>❑ **See Fact Sheet SC-30, "Outdoor Loading and Unloading," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com** |

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| ❑ N. **Fire Sprinkler Test Water** | | ❑ **Provide a means to drain fire sprinkler test water to the sanitary sewer.** | ❑ **See the note in Fact Sheet SC-41, "Building and Grounds Maintenance," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com** |
| O. **Miscellaneous Drain or Wash Water or Other Sources**<br>❑ **Boiler drain lines**<br>❑ **Condensate drain lines**<br>❑ **Rooftop equipment**<br>❑ **Drainage sumps**<br>☒ **Roofing, gutters, and trim.**<br>❑ **Other sources** | | ❑ **Boiler drain lines shall be directly or indirectly connected to the sanitary sewer system and may not discharge to the storm drain system.**<br>❑ **Condensate drain lines may discharge to landscaped areas if the flow is small enough that runoff will not occur. Condensate drain lines may not discharge to the storm drain system.**<br>❑ **Rooftop equipment with potential to produce pollutants shall be roofed and/or have secondary containment.**<br>❑ **Any drainage sumps on-site shall feature a sediment sump to reduce the quantity of sediment in pumped water.**<br>❑ **Avoid roofing, gutters, and trim made of copper or other unprotected metals that may leach into runoff.**<br>**Include controls for other sources as specified by local reviewer.** | |

STORMWATER POLLUTANT SOURCES/SOURCE CONTROL CHECKLIST

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| ☒ P. **Plazas, sidewalks, and parking lots.** | | | ☒ **Sweep plazas, sidewalks, and parking lots regularly to prevent accumulation of litter and debris. Collect debris from pressure washing to prevent entry into the storm drain system. Collect washwater containing any cleaning agent or degreaser and discharge to the sanitary sewer not to a storm drain.** |

# Appendix 9: O&M

*Operation and Maintenance Plan and Documentation of Finance, Maintenance and Recording Mechanisms*

***WILL BE PROVIDED DURING FINAL ENGINEERING***

# Appendix 10: Educational Materials

*BMP Fact Sheets, Maintenance Guidelines and Other End-User BMP Information*

# Stormwater and the Construction Industry

## Protect Natural Features



Bad

Good

- Minimize clearing.
- Minimize the amount of exposed soil.
- Identify and protect areas where existing vegetation, such as trees, will not be disturbed by construction activity.
- Protect streams, stream buffers, wild woodlands, wetlands, or other sensitive areas from any disturbance or construction activity by fencing or otherwise clearly marking these areas.

## Construction Phasing



- Sequence construction activities so that the soil is not exposed for long periods of time.
- Schedule or limit grading to small areas.
- Install key sediment control practices before site grading begins.
- Schedule site stabilization activities, such as landscaping, to be completed immediately after the land has been graded to its final contour.

## Vegetative Buffers

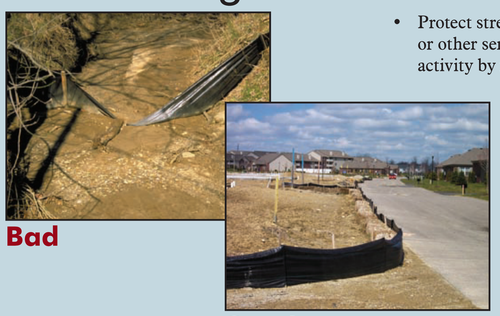


Bad

Good

- Protect and install vegetative buffers along waterbodies to slow and filter stormwater runoff.
- Maintain buffers by mowing or replanting periodically to ensure their effectiveness.

## Silt Fencing



Bad

Good

- Inspect and maintain silt fences after each rainstorm.
- Make sure the bottom of the silt fence is buried in the ground.
- Securely attach the material to the stakes.
- Don't place silt fences in the middle of a waterway or use them as a check dam.
- Make sure stormwater is not flowing around the silt fence.

# Maintain your BMPs!

**IN RIVERSIDE COUNTY....Call 1-800-506-2555**

**TO REPORT ILLEGAL STORMDRAIN DISPOSAL**

E-mail: Flood.fcnpdes@co.riverside.ca.us

Visit our website: www.floodcontrol.co.riverside.ca.us

Brought to you by the Storm Water/Clean Water Pollution Protection Program.....

**REMEMBER, ONLY RAIN IN THE STORMDRAIN!**

## Site Stabilization



Bad

Good

- Vegetate, mulch, or otherwise stabilize all exposed areas as soon as land alterations have been completed.

## Construction Entrances



Bad

Good

- Remove mud and dirt from the tires of construction vehicles before they enter a paved roadway.
- Properly size entrance BMPs for all anticipated vehicles.
- Make sure that the construction entrance does not become buried in soil.

## Slopes



Bad

Good

- Rough grade or terrace slopes.
- Break up long slopes with sediment barriers, or under drain, or divert stormwater away from slopes.

## Dirt Stockpiles



Bad

Good

- Cover or seed all dirt stockpiles.

## Storm Drain Inlet Protection



Bad

Good

- Use rock or other appropriate material to cover the storm drain inlet to filter out trash and debris.
- Make sure the rock size is appropriate (usually 1 to 2 inches in diameter).
- If you use inlet filters, maintain them regularly.

*www.epa.gov/npdes/menuofbmps*

# Stormwater and the Construction Industry

## *Planning and Implementing Erosion and Sediment Control Practices*

The construction industry is a critical participant in the nation's efforts to protect streams, rivers, lakes, wetlands, and oceans. Through the use of best management practices (BMPs), construction site operators are the key defense against erosion and sedimentation.

As stormwater flows over a construction site, it picks up pollutants like sediment, debris, and chemicals. High volumes of stormwater can also cause stream bank erosion, and destroy downstream aquatic habitat. Preventing soil erosion and sedimentation is an important responsibility at all construction sites.

In addition to the environmental impact, uncontrolled erosion can have a significant financial impact on a construction project. It costs money and time to repair gullies, replace vegetation, clean sediment-clogged storm drains, replace poorly installed BMPs, and mitigate damage to other people's property or to natural resources.

**Best Management Practice (BMP)**
A BMP is a method used to prevent or control stormwater runoff and the discharge of pollutants, including sediment, into local waterbodies. Silt fences, inlet protection, and site-stabilization techniques are typical BMPs on a construction site.

**Operator**
An operator is someone who has control over and the ability to modify construction plans and specifications (e.g. owner, general contractor)

or

Someone who has control over the day-to-day operations at a site (e.g., owner, general contractor) that are necessary to ensure compliance with the permit requirements. It is the responsibility of a construction site owner or operator to contain stormwater runoff and prevent erosion during **all** stages of a project.

There may be more than one person at a site who meets these definitions and must apply for permit coverage. (States may have different definitions of the term "operator.")

### So what's being done about polluted runoff?

The Clean Water Act includes the National Pollutant Discharge Elimination System (NPDES) permitting program. As of January 2003, 44 states and territories are authorized to issue NPDES stormwater permits. If your state isn't authorized to operate the NPDES stormwater permit program, EPA issues the permits. Permits vary from state to state, so contact your state or EPA for specific information. Your permitting authority has specific information on your state's NPDES stormwater permit program. In general, construction permits require construction operators to do all of the following:

- Develop and implement a stormwater pollution prevention plan
- Submit a permit application or notice of intent (NOI)
- Comply with the permit, including maintaining BMPs and inspecting the site

Under the NPDES program, construction activities that disturb 1 or more acres are required to obtain stormwater permit coverage. States have different names for the plans that construction operators must develop, such as

- Stormwater pollution prevention plan
- Erosion and sediment control plan
- Erosion control and stormwater management plan
- Stormwater management plan
- Water pollution control plan
- Pollution prevention plan

This document uses the term "*Plan*."

### I think I need a permit... Where do I start?

All land-disturbing activities, including clearing, grading, and excavation, that disturb **1 or more acres** are required to be covered under a state or EPA-issued NPDES construction stormwater permit **prior to land disturbance**. Permit requirements vary by state. Begin by researching the specific requirements in your state. You might already be subject to local erosion and sediment control requirements, but that doesn't release you from the requirements of the NPDES program at the state or EPA level. Although you must comply with both sets of requirements, in most cases they have been designed to be complementary. Contact your permitting authority to find out exactly what you need to do. A good place to start your search is the Construction Industry Compliance Assistance web site at http://www.envcap.org/cica.

The NPDES permit requirements include small construction activities that are part of a larger common plan of development or sale, such as a single lot within a larger subdivision. For developments with multiple operators, all operators must have permit coverage for their individual parts of the larger development, no matter how large or small each operation happens to be. When there are multiple operators at one site, they're encouraged to develop and share one comprehensive Plan and obtain permit coverage as co-permitees.

The **owner or operator** of the construction site is responsible for complying with the requirements of the permit. Responsibilities include developing a Plan, obtaining permit coverage, implementing BMPs, and stabilizing the site at the end of the construction activity.

**Construction sites that discharge unpermitted stormwater are in violation of the Clean Water Act and may be subject to fines of up to $27,500 a day per violation.**

#### Determine your eligibility

All construction activity that disturbs 1 or more acres of land, as well as activity that disturbs less than 1 acre but is part of a larger common plan of development, must obtain permit coverage.

#### Read and understand your stormwater permit requirements

Get a copy of the permit for construction activities and a permit application (or notice of intent form) from your state or EPA permitting authority.

#### Develop a Plan

Most states do not require you to submit your Plan. However, you do need to keep the Plan on site. If that's impractical, you may post a notice that tells where the Plan is kept so it can be accessed by the permitting authority and other interested parties.

You'll need to post a copy of your completed application on site. Put it in a place where the public can see it so they'll know your site is covered by an NPDES permit!

#### Apply for permit coverage

Once you understand your permit requirements and have developed a Plan, you can submit a stormwater permit application (or notice of intent) to your permitting authority. This must be done before beginning any land disturbance on the site. Some states require a few days of lead time, so check with your permitting authority. Once you've submitted the application, you must satisfy the conditions of the permit.

#### Implement the Plan

Be prepared to implement the BMPs in your Plan before construction begins. Ensure that BMPs are properly maintained, and upgrade and repair them as necessary.

## Developing and Implementing a Plan

You must have a Plan that includes erosion and sediment control and pollution prevention BMPs. These Plans require

- Advance planning and training to ensure proper implementation of the BMPs
- Erosion and sediment control BMPs in place until the area is permanently stabilized
- Pollution prevention BMPs to keep the construction site "clean"
- Regular inspection of the construction site to ensure proper installation and maintenance of BMPs

Fortunately, the practices and measures that must be included in your Plan are already part of the standard operating procedures at many construction sites.

Six steps are associated with developing and implementing a stormwater Plan. There's a wealth of information available on developing pollution prevention plans. Please contact your permitting authority for help in finding additional guidance materials, or visit www.epa.gov/npdes/stormwater. A sample construction plan is available at www.epa.gov/npdes/pubs/sample_swppp.pdf.

### 1. *Site Evaluation and Design Development*

- **Collect site information**
- **Develop site plan design**
- **Prepare pollution prevention site map**

The first step in preparing a Plan is to define the characteristics of the site and the type of construction that will occur. This involves collecting site information, identifying natural features that should be protected, developing a site plan design, describing the nature of the construction activity, and preparing a pollution prevention site map.

### 2. *Assessment*

- **Measure the site area**
- **Determine the drainage areas**
- **Calculate the runoff coefficient**

The next step is assessing the impact the project will have on stormwater runoff. Determine the drainage areas and estimate the runoff amounts and velocities. For more information on calculatng the runoff coefficient, go to www.epa.gov/npdes/pubs/chap02_conguide.pdf, page 11.

### 3. *Control Selection and Plan Design*

- **Review and incorporate state or local requirements**
- **Select erosion and sediment controls**
- **Select other controls**
- **Select stormwater management controls**
- **Indicate the location of controls on the site map**
- **Prepare an inspection and maintenance plan**
- **Coordinate controls with construction activity**
- **Prepare sequence of major activities**

In the third step you'll actually document your procedures to prevent and control polluted stormwater runoff. You must delineate areas that will not be disturbed, including critical natural areas like streamside areas, floodplains, and trees. You must also identify the measures (or BMPs) you'll use to protect these areas.

Phasing your project to minimize the amount of exposed soil at any given time is a highly effective way to prevent erosion. Erosion control measures designed to prevent soil from being mobilized include diversions to route stormwater away from exposed soils and stabilization with vegetation, mulch, and geotextiles. Sedimentation control measures designed to remove sediment from stormwater or prevent it from leaving the site include silt fences, sediment traps, and diversions.

You'll need to select erosion and sediment controls—including stabilization measures for protecting disturbed areas and structural controls for diverting run-off and removing sediment—that are appropriate for your particular site. The appropriateness of the control measures will depend on several factors, but will be influenced most directly by the site characteristics. Some stabilization measures you might consider are temporary seeding, permanent seeding, and mulching. Structural control measures include earth dikes, silt fences, and sediment traps. No single BMP will meet all of the erosion and sedimentation control needs of a construction site. A combination of BMPs is necessary. For more information on the types of BMPs appropriate for your construction site, see the BMP fact sheet series available at www.epa.gov/npdes/menuofbmps.

#### Soil erosion control tips...

- Design the site to infiltrate stormwater into the ground and to keep it out of storm drains. Eliminate or minimize the use of stormwater collection and conveyance systems while maximizing the use of stormwater infiltration and bioretention techniques.
- Minimize the amount of exposed soil on site.
  - To the extent possible, plan the project in stages to minimize the amount of area that is bare and subject to erosion. The less soil exposed, the easier and cheaper it will be to control erosion.
  - Vegetate disturbed areas with permanent or temporary seeding immediately upon reaching final grade.
  - Vegetate or cover stockpiles that will not be used immediately.
- Reduce the velocity of stormwater both onto and away from the project area.
  - Interceptors, diversions, vegetated buffers, and check dams are a few of the BMPs that can be used to slow down stormwater as it travels across and away from the project site.
  - Diversion measures can also be used to direct flow away from exposed areas toward stable portions of the site.
  - Silt fences and other types of perimeter filters should never be used to reduce the velocity of runoff.
- Protect defined channels immediately with measures adequate to handle the storm flows expected.
  - Sod, geotextile, natural fiber, riprap, or other stabilization measures should be used to allow the channels to carry water without causing erosion. Use softer measures like geotextile or vegetation where possible to prevent downstream impacts.
- Keep sediment on site.
  - Place aggregate or stone at construction site vehicle exits to accommodate at least two tire revolutions of large construction vehicles. Much of the dirt on the tires will fall off before the vehicle gets to the street.
  - Regular street sweeping at the construction entrance will prevent dirt from entering storm drains. Do not hose paved areas.
  - Sediment traps and basins are temporary structures and should be used in conjunction with other measures to reduce the amount of erosion.
- Maintaining all BMPs is critical to ensure their effectiveness during the life of the project.
  - Regularly remove collected sediment from silt fences, berms, traps, and other BMPs.
  - Ensure that geotextiles and mulch remain in place until vegetation is well established.
  - Maintain fences that protect sensitive areas, silt fences, diversion structures, and other BMPs.

#### Other BMPs and Activities to Control Polluted Runoff

You'll need to select other controls to address potential pollutant sources on your site. Construction materials, debris, trash, fuel, paint, and stockpiles become pollution sources when it rains. Basic pollution prevention practices can significantly reduce the amount of pollution leaving construction sites. The following are some simple practices that should be included in the Plan and implemented on site:

- Keep potential sources of pollution out of the rain as practicable (e.g., inside a building, covered with plastic or tarps, or sealed tightly in a leak-proof container).
- Clearly identify a protected, lined area for concrete truck washouts. This area should be located away from streams, storm drain inlets, or ditches and should be cleaned out periodically.
- Park, refuel, and maintain vehicles and equipment in one area of the site to minimize the area exposed to possible spills and fuel storage. This area should be well away from streams, storm drain inlets, or ditches. Keep spill kits close by and clean up any spills or leaks immediately, including spills on pavement or earthen surfaces.
- Practice good housekeeping. Keep the construction site free of litter, construction debris, and leaking containers. Keep all waste in one area to minimize cleaning.
- Never hose down paved surfaces to clean dust, debris, or trash. This water could wash directly into storm drains or streams. Sweep up materials and dispose of them in the trash. Never bury trash or debris!
- Dispose of hazardous materials properly.

### 4. *Certification and Notification*

- **Certify the Plan**
- **Submit permit application or notice of intent**

Once the Plan has been developed, an authorized representative must sign it. Now is the time to submit the permit application or notice of intent. Your permit might require that the Plan be kept on site, so be sure to keep it available for the staff implementing the Plan.

***Erosion and sedimentation control practices are only as good as their installation and maintenance.***

### 5. *Implementing and Maintaining a Plan*

- **Implement controls**
- **Inspect and maintain controls**
- **Update/change the Plan**
- **Report releases of hazardous materials**

A Plan describes the practices and activities you'll use to prevent stormwater contamination and meet the NPDES permit requirements. Make sure that the Plan is implemented and that the Plan is updated as necessary to reflect changes on the site.

Erosion and sedimentation control practices are only as good as their installation and maintenance. Train the contractors that will install the BMPs and inspect immediately to ensure that the BMPs have been installed correctly.

Regularly inspect the BMPs (especially before and after rain events) and perform any necessary repairs or maintenance immediately. Many BMPs are designed to handle a limited amount of sediment. If not maintained, they'll become ineffective and a source of sediment pollution.

It's also important to keep records of BMP installation, implementation, and maintenance. Keep track of major grading activities that occur on the site, when construction activities cease (temporarily or permanently), and when a site is temporarily or permanently stabilized.

If construction plans change at any time, or if more appropriate BMPs are chosen for the site, update the Plan accordingly.

### 6. *Completing the Project: Final Stabilization and Termination of the Permit*

- **Final stabilization**
- **Notice of Termination**
- **Record retention**

Many states and EPA require a Notice of Termination (NOT) or other notification signifying that the construction activity is completed. An NOT is required when

- Final stabilization has been achieved on all portions of the site for which the permittee is responsible.
- Another operator has assumed control over all areas of the site that have not been finally stabilized. That operator would need to submit a new permit application to the permitting authority.
- For residential construction only, temporary stabilization of a lot has been completed prior to transference of ownership to the homeowner, with the homeowner being made aware of the need to perform final stabilization.

Permittees must keep a copy of their permit application and their Plan for at least 3 years following final stabilization. This period may be longer depending on state and local requirements.

#### Preconstruction Checklist

- A site description, including
  - Nature of the activity
  - Intended sequence of major construction activities
  - Total area of the site
  - Existing soil type and rainfall runoff data
  - A site map with:
    - Drainage patterns
    - Approximate slopes after major grading
    - Area of soil disturbance
    - Outline of areas which will not be disturbed
    - Location of major structural and nonstructural soil erosion controls
    - Areas where stabilization practices are expected to occur
    - Surface waters
    - Stormwater discharge locations
  - Name of the receiving water(s)
- A description of controls:
  - Erosion and sediment controls, including
    - Stabilization practices for all areas disturbed by construction
    - Structural practices for all drainage/discharge locations
  - Stormwater management controls, including
    - Measures used to control pollutants occurring in stormwater discharges after construction activities are complete
    - Velocity dissipation devices to provide nonerosive flow conditions from the discharge point along the length of any outfall channel
  - Other controls, including
    - Waste disposal practices that prevent discharge of solid materials
    - Measures to minimize offset tracking of sediments by construction vehicles
    - Measures to ensure compliance with state or local waste disposal, sanitary sewer, or septic system regulations
  - Description of the timing during the construction when measures will be implemented
- State or local requirements incorporated into the Plan
- Inspection and maintenance procedures for control measures identified in the Plan
- Contractor certification and Plan certification

#### Implementation Checklist

- Maintain records of construction activities, including
  - Dates when major grading activities occur
  - Dates when construction activities temporarily cease on the site or a portion of the site
  - Dates when construction activities permanently cease on the site or a portion of the site
  - Dates when stabilization measures are completed on the site
- Prepare inspection reports summarizing
  - Name of person conducting BMP inspections
  - Qualifications of person conducting BMP inspections
  - BMPs/areas inspected
  - Observed conditions
  - Necessary changes to the Plan
- Report releases of reportable quantities of oil or hazardous materials
  - Notify the National Response Center at 800-424-8802 immediately
  - Report releases to your permitting authority immediately, or as specified in your permit. You must also provide a written report within 14 days.
  - Modify the Plan to include
    - The date of release
    - Circumstances leading to the release
    - Steps taken to prevent reoccurrence of the release
- Modify Plan as necessary
  - Incorporate requests of the permitting authority to bring the Plan into compliance
  - Address changes in design, construction operation, or maintenance that affect the potential for discharge of pollutants

***An ounce of prevention is worth a pound of cure! It's far more efficient and cost-effective to prevent pollution than it is to try to correct problems later. Installing and maintaining simple BMPs and pollution prevention techniques on site can greatly reduce the potential for stormwater pollution and can also save you money!***

***Visit www.epa.gov/npdes/stormwater for more information.***

StormWater CleanWater PROTECTION PROGRAM

## Resources

State Water Resources Control Board
Division of Water Quality
1001 I Street
Sacramento CA 95814
(916) 341-5455
www.swrcb.ca.gov/stormwtr/

Colorado River Basin Regional Water
Quality Control Board - Region 7
73-720 Fred Waring Drive, Suite 100
Palm Desert, CA 92260
(760) 346-7491
www.swrcb.ca.gov/~rwqcb7/

Santa Ana Regional Water
Quality Control Board - Region 8
3737 Main Street, Suite 500
Riverside, CA 92501-3348
(909) 782-4130
www.swrcb.ca.gov/~rwqcb8/

San Diego Regional Water
Quality Control Board - Region 9
9771 Clairemont Mesa Blvd., Suite A
San Diego, CA 92124
(858) 467-2952
www.swrcb.ca.gov/~rwqcb9/

**To report a hazardous materials spill, call:**

Riverside County Hazardous Materials
Emergency Response Team
**(909) 358-5055** 8:00 a.m. – 5:00 p.m.
**(909) 358-5245** after 5:00 p.m.

In an emergency call: **911**

**For recycling and hazardous waste disposal, call:**

**(909) 358-5055**

**To report an illegal dumping or a clogged storm drain, call:**

**1-800-506-2555**

To order additional brochures or to obtain information on other pollution prevention activities, please call (909) 955-1200 or visit the StormWater/CleanWater Protection Program website at:
www.co.riverside.ca.us/depts/flood/waterquality npdes.asp

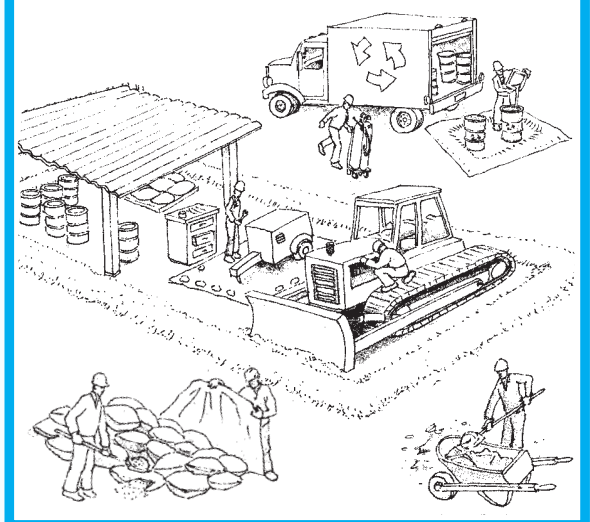
StormWater CleanWater
PROTECTION PROGRAM

The StormWater/CleanWater Protection Program gratefully acknowledges the Santa Clara Valley Nonpoint Pollution Control Program, Alameda Countywide CleanWater Program and the City of Los Angeles Stormwater Management Division for information provided in this brochure.

# StormWater Pollution

What you should know for...

## GENERAL CONSTRUCTION & SITE SUPERVISION



## Best Management Practices (BMPs) for:

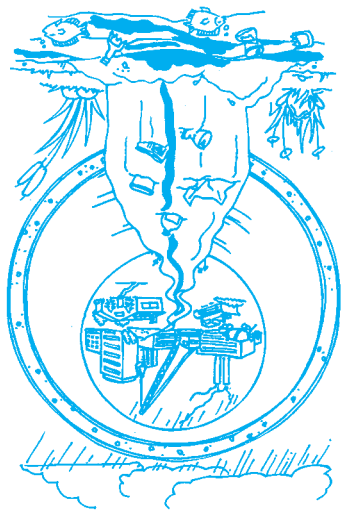
- Developers
- General Contractors
- Home Builders
- Construction Inspectors
- Anyone in the construction business

## StormWater Pollution . . . What You Should Know

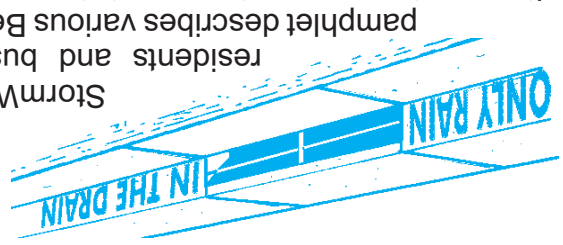
Riverside County has two drainage systems - sewers and storm drains. The storm drain system was designed to reduce flooding by carrying excess rainwater away from streets and developed areas. Since the storm drain system does not provide for water treatment, it also serves the *unintended* function of transporting pollutants directly to our local waterways.

*Unlike sanitary sewers, storm drains are not connected to a wastewater treatment plant – they flow directly to our local streams, rivers and lakes.*

Stormwater runoff is a part of the natural hydrologic process. However, land development and construction activities can significantly alter natural drainage processes and introduce pollutants into stormwater runoff. Polluted stormwater runoff from construction sites has been identified as a major source of water pollution in California. It jeopardizes the quality of our local waterways and can pose a serious threat to the health of our aquatic ecosystems.



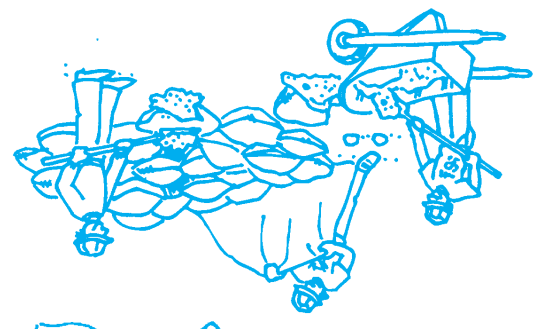
## The Cities and County of Riverside StormWater/CleanWater Protection Program

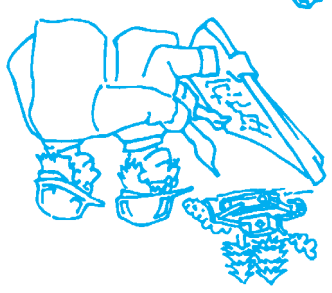



Because preventing pollution is much easier and less costly than cleaning up "after the fact," the Cities and County of Riverside StormWater/CleanWater Protection Program informs residents and businesses on pollution prevention activities. This pamphlet describes various Best Management Practices (BMPs) that construction site operators can use to prevent stormwater pollution.

In accordance with applicable federal and state law, the Cities and County of Riverside have adopted ordinances for stormwater management and discharge control that **prohibit** the discharge of pollutants into the storm drain system or local surface water. This includes discharges from construction sites containing sediment, concrete, mortar, paint, solvents, lubricants, vehicle fluids, fuel, pesticides, and construction debris.

**PLEASE NOTE:** The Federal, State and local regulations strictly prohibit the discharge of sediment and pollutants into the streets, the storm drain system or waterways. As an owner, operator or supervisor of a construction site, you may be held financially responsible for any environmental damage caused by your subcontractors or employees.





## STORMWATER POLLUTION FROM CONSTRUCTION ACTIVITIES

The two most common sources of stormwater pollution problems associated with construction activities are ***erosion*** and ***sedimentation***. Failure to maintain adequate erosion and sediment controls at construction sites often results in sediment discharges into the storm drain system, creating multiple problems once it enters local waterways.

Construction vehicles and heavy equipment can also track significant amounts of mud and sediment onto adjacent streets. Additionally, wind may transport construction materials and wastes into streets storm drains, or directly into our local waterways.

## What Should You Do?

## Advance Planning to Prevent Pollution

- ❑ Remove existing vegetation only as needed.
- ❑ Schedule excavation, grading, and paving operations for dry weather periods, if possible.
- ❑ Designate a specific area of the construction site, well away from storm drain inlets or watercourses, for material storage and equipment maintenance.
- ❑ Develop and implement an effective combination of erosion and sediment controls for the construction site.
- ❑ Practice source reduction by ordering only the amount of materials that are needed to finish the project.
- ❑ Educate your employees and subcontractors about stormwater management requirements and their pollution prevention responsibilities.
- ❑ Control the amount of surface runoff at the construction site by impeding internally generated flows and using berms or drainage ditches to direct incoming offsite flows to go around the site. ***Note:*** *Consult local drainage policies for more information.*

# Best Management Practices

The following Best Management Practices (BMPs) can significantly reduce pollutant discharges from your construction site. Compliance with stormwater regulations can be as simple as minimizing stormwater contact with potential pollutants by providing covers and secondary containment for construction materials, designating areas away from storm drain systems for storing equipment and materials and implementing good housekeeping practices at the construction site.

- ❑ Protect all storm drain inlets and streams located near the construction site to prevent sediment-laden water from entering the storm drain system.
- ❑ Limit access to and from the site. Stabilize construction entrances/exits to minimize the track out of dirt and mud onto adjacent streets. Conduct frequent street sweeping.
- ❑ Protect stockpiles and construction materials from winds and rain by storing them under a roof, secured impermeable tarp or plastic sheeting.
- ❑ Avoid storing or stockpiling materials near storm drain inlets, gullies or streams.
- ❑ Phase grading operations to limit disturbed areas and duration of exposure.
- ❑ Perform major maintenance and repairs of vehicles and equipment offsite.
- ❑ Wash out concrete mixers only in designated washout areas at the construction site.
- ❑ Set-up and operate small concrete mixers on tarps or heavy plastic drop cloths.
- ❑ Keep construction sites clean by removing trash, debris, wastes, etc. on a regular basis.
- ❑ Clean-up spills immediately using dry clean-up methods (e.g., absorbent materials such as cat litter, sand or rags for liquid spills; sweeping for dry spills such as cement, mortar or fertilizer) and by removing the contaminated soil from spills on dirt areas. .
- ❑ Prevent erosion by implementing any or a combination of soil stabilization practices such as mulching, surface roughening, permanent or temporary seeding.
- ❑ Maintain all vehicles and equipment in good working condition. Inspect frequently for leaks, and repair promptly.
- ❑ Practice proper waste disposal. Many construction materials and wastes, including solvents, water-based paint, vehicle fluids, broken asphalt and concrete, wood, and cleared vegetation can be recycled. Materials that cannot be recycled must be taken to an appropriate landfill or disposed of as hazardous waste.
- ❑ Cover open dumpsters with secured tarps or plastic sheeting. Never clean out a dumpster by washing it down on the construction site.
- ❑ Arrange for an adequate debris disposal schedule to insure that dumpsters do not overflow.

# General Construction Activities Stormwater Permit

## *(Construction Activities General Permit)*

The State Water Resources Control Board (SWRCB) adopted a new Construction Activities General Permit (WQ Order No. 99-08DWQ) on August 19, 1999, superseding the now expired SWRCB statewide General Permit (WQ Order No. 92-08DWQ). This permit is administered and enforced by the SWRCB and the local Regional Water Quality Control Boards (RWQCB). The updated Construction Activities General Permit establishes a number of new stormwater management requirements for construction site operator.

***NOTE:*** *Some construction activies stormwater permits are issued on a regional basis. Consult your local RWQCB to find out if your project requires coverage under any of these permits.*

## Frequently Asked Questions:

### *Does my construction site require coverage under the Construction Activities General Permit?*

Yes, if construction activity results in the disturbance of five or more acres of total land area or is part of a common plan of development that results in the disturbance of five or more acres.

### *How do I obtain coverage under the Construction Activities General Permit?*

Obtain the permit package and submit the completed Notice of Intent (NOI) form to the SWRCB prior to grading or disturbing soil at the construction site. For ongoing construction activity involving a change of ownership, the new owner must submit a new NOI within 30 days of the date of change of ownership. The completed NOI along with the required fee should be mailed to the SWRCB.

### *What must I do to comply with the requirements of the Construction Activities General Permit?*

- ● Implement BMPs for non-stormwater discharges year-round.
- ● Prepare and implement a Stormwater Pollution Prevention Plan (SWPPP) prior to commencing construction activities.
- ● Keep a copy of the SWPPP at the construction site for the entire duration of the project.
- ● Calculate the anticipated stormwater run-off.
- ● Implement an effective combination of erosion and sediment control on all soil disturbed areas.
- ● Conduct site inspections prior to anticipated storm events, every 24-hours during extended storm events, and after actual storm event.
- ● Perform repair and maintenance of BMPs as soon as possible after storm events depending upon worker safety.
- ● Update the SWPPP as needed, to manage pollutants or reflect changes in site conditions.
- ● Include description of post construction BMPs at the construction site, including parties responsible for long-term maintenance.

***NOTE:*** *Please refer to the Construction Activities General Permit for detailed information. You may contact the SWRCB, your local RWQCB, or visit the SWRCB website at www.swrcb.ca.gov/stormwtr/ to obtain a State Construction Activities Stormwater General Permit packet.*

### *How long is this Construction Activities General Permit in effect?*

The Permit coverage stays in effect untilyou submit a Notice of Termination (NOT) to the SWRCB. For the purpose of submitting a NOT, all soil disturbing activities have to be completed and one of the three following criteria has to be met:

1. Change of ownership;
2. A uniform vegetative cover with 70 percent coverage has been established; or,
3. Equivalent stabilization measures such as the use of reinforced channel liners, soil cement, fiber matrices, geotextiles, etc., have been employed.



Landscaping and garden maintenance activities can be major contributors to water pollution. Soils, yard wastes, over-watering and garden chemicals become part of the urban runoff mix that winds its way through streets, gutters and storm drains before entering lakes, rivers, streams, etc. Urban runoff pollution contaminates water and harms aquatic life!

In Riverside County, report illegal discharges into the storm drain, call
1-800-506-2555
"Only Rain Down the Storm Drain"

## Important Links:

Riverside County Household Hazardous Waste Collection Information
1-800-304-2226 or www.rivcowm.org

Riverside County Backyard Composting Program
1-800-366-SAVE

Integrated Pest Management (IPM) Solutions
www.ipm.ucdavis.edu

California Master Gardener Programs
www.mastergardeners.org
www.camastergardeners.ucdavis.edu

California Native Plant Society
www.cnps.org

The Riverside County "Only Rain Down the Storm Drain" Pollution Prevention Program gratefully acknowledges Orange County's Storm Water Program for their contribution to this brochure.

# ...Only Rain Down ...the Storm Drain

*What you should know for... Landscape and Gardening*

Best Management tips for:

- Professionals
- Novices
- Landscapers
- Gardeners
- Cultivators



# Tips for Landscape & Gardening

This brochure will help you to get the most of your lawn and gardening efforts and keep our waterways clean. Clean waterways provide recreation, establish thriving fish habitats, secure safe sanctuaries for wildlife, and add beauty to our communities. NEVER allow gardening products or waste water to enter the street, gutter or storm drain.

## *General Landscaping Tips*

- Protect stockpiles and materials from wind and rain by storing them under tarps or secured plastic sheeting.
- Prevent erosion of slopes by planting fast-growing, dense ground covering plants. These will shield and bind the soil.



- Plant native vegetation to reduce the amount of water, fertilizers and pesticides applied to the landscape.
- Never apply pesticides or fertilizers when rain is predicted within the next 48 hours.

## *Garden & Lawn Maintenance*

- Do not overwater. Use irrigation practices such as drip irrigation, soaker hoses or micro-spray systems. Periodically inspect and fix leaks and misdirected sprinklers.
- Do not rake or blow leaves, clippings or pruning waste into the street, gutter or storm drain. Instead, dispose of green waste by composting, hauling it to a permitted landfill, or recycling it through your city's program.



- Consider recycling your green waste and adding "nature's own fertilizer" to your lawn or garden.
- Read labels and use only as directed. Do not over-apply pesticides or fertilizers. Apply to spots as needed, rather than blanketing an entire area.
- Store pesticides, fertilizers and other chemicals in a dry covered area to prevent exposure that may result in the deterioration of containers and packaging.
- Rinse empty pesticide containers and re-use rinse water as you would use the product. Do not dump rinse water down storm drains or sewers. Dispose of empty containers in the trash.
- When available, use non-toxic alternatives to traditional pesticides, and use pesticides specifically designed to control the pest you are targeting.
- Try natural long-term common sense solutions first. Integrated Pest Management (IPM) can provide landscaping guidance and solutions, such as:
  - **Physical Controls** - Try hand picking, barriers, traps or caulking holes to control weeds and pests.
  - **Biological Controls** - Use predatory insects to control harmful pests.
  - **Chemical Controls** - Check out www.ipm.ucdavis.edu before using chemicals. Remember, all chemicals should be used cautiously and in moderation.
- If fertilizer is spilled, sweep up the spill before irrigating. If the spill is liquid, apply an absorbent material such as cat litter, and then sweep it up and dispose of it in the trash.
- Take unwanted pesticides to a Household Waste Collection Center to be recycled.
- *Dumping toxics into the street, gutter or storm drain is illegal!*

**www.bewaterwise.com** Great water conservation tips and drought tolerant garden designs.

**www.ourwaterourworld.com** Learn how to safely manage home and garden pests.

**Additional information can also be found on the back of this brochure.**



# Living on the Edge

Your community preserves habitat for important native plants and animals. By habitat, we mean homes; food, water, and places with space to live. The habitat is managed as part of a ***biological conservation easement*****,** a legal agreement that permanently limits its use.

Many conservation easements include a waterway or wetland because plants and animals need clean, fresh water, the most limited resource in our dry Southern California climate. A waterway (also called watercourse, arroyo, wash) conveys a flowing creek, stream, or river, which provides drinking water for local and migrating wildlife.

Not all of our waterways have visible flowing water year-round. Some creeks and streams continue to flow underground, while others flow for a short time after a storm (ephemeral). The small, and often dry washes are important to wildlife because they provide habitat and their periodic flows drain into larger waterways. It's essential that people do not degrade the quality of any water that reaches local waterways.

Water supports an abundance of vegetation and a variety of life, or *biodiversity.* Streamside vegetation, along dry or flowing waterways, is referred to as *riparian.* **Native** riparian plants provide **native** animals with suitable food, shelter, nesting sites and escape-cover from predators.

## Help Your Wild Next-Door Neighbors

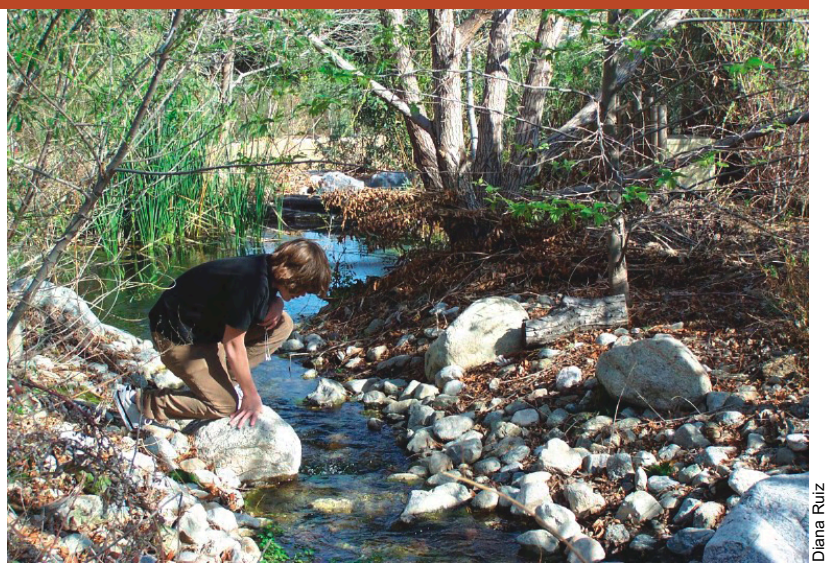
The purpose of this publication is to help homeowners become *habitat-friendly* neighbors for nearby habitat lands. The *Resources Directory*, inserted inside this booklet, provides helpful websites and contact information for agencies, organizations, gardens, and native plant nurseries.



Gerald & Buff Crosi, California Academy of Sciences

Unfortunately, our modern-day lifestyles have negative impacts on the environment around us. Human activity in, or near waterways can damage the capacity of the habitat to support some kinds of plant and animal life, especially species that do not adapt to urban/suburban conditions. Here are some ways to prevent and reduce negative impacts and help restore habitat to healthy conditions.

# Reduce Impacts on Native Wildlife



Diana Ruiz

**Prevent light, noise, and activity in, and adjacent to wetlands.**

- If you wish to observe wildlife, please watch from afar, especially during the breeding and nesting season, from March to September. Most wild animals are naturally fearful of human contact. Human activity near a nest or den may frighten adult animals away from young and jeopardize their survival.
- When visiting natural areas, disturb as little as possible. Avoid walking or riding in a stream course or on channel banks. Heavy foot traffic, horses, and off-road vehicles may cause channel banks to collapse, accelerating erosion and increasing water-born sediment and turbidity.
- Help control entry into habitat areas. Close unessential roadways to prevent access for illegal dumping, trespass, and off-road vehicle use.
- Leave nothing behind.
- Focus necessary lighting downward and inward toward your home, yard, and buildings.
- To report poaching or polluting call CalTIP, Californians Turn In Poachers and Polluters, a confidential secret witness program. The toll free telephone number operates 24 hours a day, 7 days a week. (See the *Resources Directory* insert for contact information.)



USDA Natural Resources Conservation Service

**Do not allow pets to roam in habitat land where they will disturb and hunt native wildlife.** Keep pets on a leash and droppings out of waterways. Cats and dogs stress or kill wildlife and prevent natural ecosystems from supporting their own predators, such as hawks, coyotes, foxes, and bobcats. Conversely, domesticated animals face hazards in wild areas. Pets may be attacked by predators, such as coyotes and rattlesnakes, or may contract disease, fleas, and ticks.

**Do not release unwanted animals into the wild.** Abandoned cats, dogs, birds, reptiles and fish can have significant impacts on populations of native species, either through disease, predation or competition for food and space.



Lee Karney/ U.S. Fish and Wildlife Service

Brown-headed Cowbird

- Exotic invaders crowd out native species both on land and in water. Do not place fish, frogs, crayfish, turtles, or aquatic plants into creeks, streams or lakes. Some non-native species are not only able to survive, but also reproduce explosively due to a lack of natural predators. For example, the brown-headed cowbird is overwhelming riparian habitats. The cowbird lays its eggs in another bird's nest to the detriment of the host's young.



Mark A. Chappell

The endangered Least Bell's Vireo is threatened by the Brown-headed Cowbird.

- Pets are usually unable to survive in wildlands. They starve to death or are eaten. If you cannot find a home for a pet, contact animal control, your local animal shelter, or the Humane Society.

**Respect and protect wild animals by keeping them wild.** In some instances, being a good neighbor means protecting your living area by excluding certain kinds of wildlife, mainly mammals. The *human habitat* includes home sites, buildings, yards, gardens, and regularly used outdoor areas. Install fencing around the human habitat portion of your property and secure enclosures to protect children, pets, and farm animals.

- Do not take small animals, such as tortoises, tadpoles, frogs, snakes, birds, lizards or eggs from the wild. Never attempt to "adopt" or domesticate a wild animal.

- Discourage dangerous predators from penetrating human habitat areas. Install fencing that will exclude predators. Place sensors that trigger sprinklers and lights to deter predators and mammals from entering areas of human activity.

- Prevent mammals from living in and near your home by closing entries, filling holes, and removing brush, junk, and woodpiles near buildings.

- Don't feed human food to wildlife. Do not leave pet food outside. Prevent garbage from becoming a food source for wild mammals by sealing trash can lids. If you compost, use closed-containers or turn piles regularly. Compost plant material only; meat scraps should not be mixed in a compost pile.



R. H. Barrett/ U. S. Fish and Wildlife Service

For more information, contact the California Department of Fish and Game.
(See the *Resources Directory* insert for contact information.)

# Reduce Impacts on Native Plants

**Remove invasive, non-native plants from home landscaping and adjacent habitat lands**, especially those that quickly spread through waterways, displacing important native species.


Diana Ruiz

Invasive Giant Reed (*Arrundo donax)* is being removed from Temescal Creek.

## DO NOT PLANT

| | |
|---|---|
| Giant reed | *Arundo donax* |
| Salt Cedar | *Tamarix chinensis* |
| Tree of Heaven | *Ailanthus altissima* |
| Red apple, heartleaf iceplant | *Aptenia cordifolia* |
| Fountain grass (yellow) | *Pennisetum setaceum* |
| Castor bean | *Ricinus communis* |
| Periwinkle | *Vinca major* |
| Peruvian (Calif.) pepper tree | *Schinus molle* |
| Brazilian pepper tree | *Schinus terebinthifolius* |
| Mexican fan palm | *Washingtonia robusta* |
| Sweet fennel | *Foeniculum vulgare* |
| Pampas grass/Jubata grass | *Cortaderia jubata/selloana* |
| Common iceplant | *Mesembryanthemum crystallinum* |
| *Myoporum* species | |

Contact your local Resource Conservation District for help identifying invasive species and for removal of exotic weeds from waterways. Visit the California Invasive Plant Council web site for suggested plants to replace invasives. (See the *Resources Directory* insert for contact information.)

# Protect Water Quality


Diana Ruiz

**Make sure that the water that flows off your property is clean.**

- Prevent trash, debris, and waste of any kind from washing off homesites and streets into gutters, storm drains, and dry washes. These drainage-ways empty into streams that flow to the Santa Ana River, and ultimately, the ocean.
- Evaluate the flow of runoff over your property. Place manure, barnyard bedding, and debris in areas where water does not pool or flow, or reuse the waste as fertilizer or mulch. Check with your local municipality for ordinances concerning the disposal of manure and bedding.
- Use care when applying fertilizers, pesticides, and herbicides on your property. Read labels “before you buy and before you apply” for directions, application rates, and disposal. Apply the correct amount at the proper time, for example, not during plant dormancy.



Praying mantis



Ladybird beetle



Lacewing

Photos by Greg Balmer

- Reduce or eliminate the use of pesticides by using “beneficial insects” (ladybugs, praying mantids, lacewings, etc.) If you must use a pesticide, use one with a *least-toxic* rating, such as insecticidal soaps, horticultural oils, pyrethrin-based insecticides, and insect growth regulators.
- Control erosion to prevent sediment from entering runoff.
- If you have a septic system, inspect and maintain it. Poorly placed and neglected septic systems contaminate groundwater and streams.

Pollutants that flow from residential and urban areas contaminate surface water and the water that percolates into underground water basins (aquifers). Much of our local water supply is pumped from underground aquifers, so keeping runoff clean is essential.

To report any non-emergency crime, such as dumping, please call your City Police or County Sheriff Departments. To report illegal grading or dumping in waterways, contact your City or County Code Enforcement Department. (See the *Resources Directory* insert for contact numbers.)

**Dispose of waste in its proper place.**

- Read product labels, and dispose of household hazardous wastes (oil based paints, pesticides, antifreeze, motor oil, batteries, flourescent bulbs, etc.) in prescribed ways and at designated disposal sites or community collection events, not on the ground or in a storm drain inlet. Whenever possible, reduce the use of hazardous materials in and around your home. Call the *Only Rain Down the Storm Drain* program for disposal dates and locations. (See the *Resources Directory* insert for contact numbers.) You can also recycle automotive fluids, tires, and batteries at car repair businesses.
- Dispose of trash at sanitary landfills.
- Compost yard and other organic wastes.



Diana Ruiz

***Better yet:***

***Reduce,***
***Reuse,***
***Recycle.***

# Provide Space for Habitat, Fire, and Flood Protection



Robert Calvo

**Siting Homes Near Waterways**
If you are building next to a waterway, leave a buffer between the waterway and your *human habitat* area of graded pads, structures, and ornamental landscaping. *Wildlife habitat* land includes areas beyond buildings, yards, and defensible space (fire safety zones), generally to be left undisturbed for wildlife. A buffer between the human habitat and a waterway provides space for habitat, flood waters, and for wildlife escape during high water.

The buffer or "setback" distance will vary according to site conditions, however a minimum 100-foot setback from the **top edge** of a waterway, not from the water itself, is recommended. This allows space for creek/stream meander and high water flows. The banks of creeks and streams "meander", which means they are constantly "wandering" or relocating. Meander naturally occurs when flows cause erosion of channel banks and deposition of sediment.

As land is converted to urban uses, the volume of flow in waterways increases. Impervious surfaces from streets, roofs, and parking lots increase the amount of runoff, erosion and pollutants that degrade water quality.



Frank Heyming

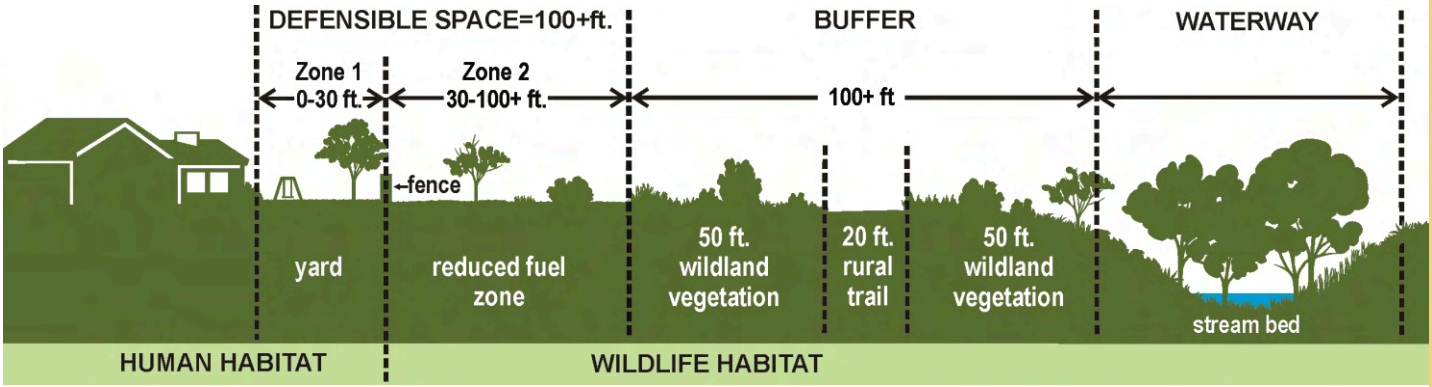
A house pad fills an important tributary to an waterway.

Many people are not aware of the vulnerability of natural ecosystems, nor are they aware that it is illegal to grade or alter a waterway without an assessment and permits from resource agencies and municipalities. If you propose an activity that will impact a stream, river, or lake, the California Department of Fish and Game (DFG) requires completion of a Streambed Alteration Agreement. Depending on the activity you are proposing, you may need to obtain a permit, agreement, or other authorization from one or more government agencies. Notify DFG, U.S. Army Corps of Engineers, and the Santa Ana Regional Water Quality Control Board during early planning, prior to beginning a project that will:

- use material from a streambed;
- divert, obstruct, or change the natural flow or the bed, channel, or bank of any river, stream, or lake;
- result in the disposal or deposition of debris, waste, or other natural material where it can pass into any river, stream, or lake.

A Streambed Alteration Agreement is also required for streams that flow intermittently, such as dry washes and waterways with subsurface flow.

It is essential that landowners do not confine, or encroach on waterways. Keep buildings, septic systems, horses, livestock, fencing, agricultural and ornamental plantings out of waterways and away from channel banks.




When building homes In fire-prone areas, avoid ridge tops and canyons. Set buildings back from the edge of steep slopes. Create a minimum distance of 100-feet of *defensible space,* a managed area around a home, where the amount of fuel (dead plants, dry leaves, wood) has been reduced. Consult with your local fire department or the California Department of Forestry and Fire Protection for fire safety and weed abatement information.
(Please see *Resources Directory* insert).

## Habitat-friendly Yards


Len Nunney

**Landscape with Locals.** Not just any California native plant is suitable for landscapes near habitat lands. Local native plants are the safest because they have unique characteristics that have helped them survive in their specific environments. Gardening with local flora helps maintain the *genetic integrity* of local plants and ecosystems. It helps maintain regional variation in vegetation and wildlife.

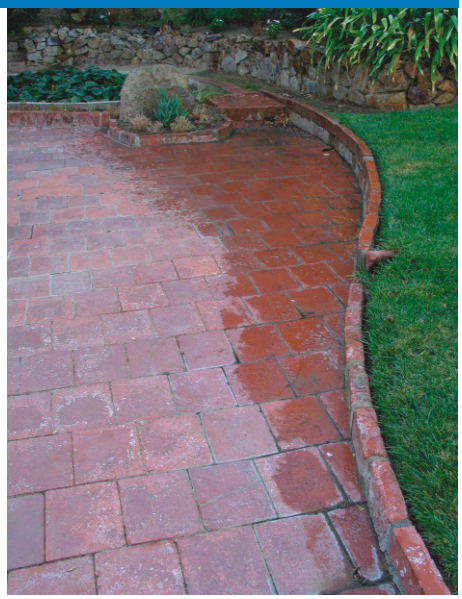
Why is regional variation important? If plants from other areas crossbreed with local natives, scientists fear that local populations would lose some of the unique characteristics that are important for success in this region. Their genetic material would no longer be unique and regionally identifiable. Plant interbreeding could reduce biological diversity, *biodiversity*, in the gene pool. There are important interactions between native plants, microorganisms, and the animals that use them, some of which are critical to the reproduction and survival of native plants and animals.

**Create habitat in your yard for urban-adapted wildlife**. Even if you live in the heart of a city, consider gardening for urban-adapted wildlife by providing a reliable water source and **local** native plants that provide food, shelter, and nesting sites. Each small patch of yard provides a stepping-stone of habitat from wildlands across the city. A patchwork of *habitat-yards* creates an urban ecosystem that more closely mimics our predevelopment, native landscape. When linked together, those patches cumulatively support biodiversity. To host a variety of native birds and butterflies in your yard, select plants that flower and fruit at different times of the year. Prune trees and shrubs in fall and early winter, rather than spring, to avoid destroying bird nests.

**Benefits of landscaping with local native plants:**

- **Most native plants are drought tolerant, so they require less water.**
- **Natives rarely require fertilizers.**
- **Patches of habitat support urban-adapted wildlife, such as birds, bats and insects that help pollinate plants.**
- **Natives rarely require pesticides. Native plants provide their own natural pest control by attracting beneficial insects that prey on troublesome bugs.**
- **Local natives help preserve *genetic diversity* and the integrity of local ecosystems.**

# Water-wise Landscapes Conserve Water



Diana Ruiz

Reduce water-use by replacing unnecessary lawn areas with native or drought-tolerant plants and with hardscape (hard surfaces), such as walkways and patios of concrete, brick, stone, decomposed granite, and permeable paving. For places where you do need a lawn, such as play areas, plant a low water-use turf variety.

When selecting a plant, find out:

- Is it water-thirsty or drought-tolerant?
- When is its growing season; when will it need water?

Most* local native plants are dormant or slow-growing during the hot, dry summers; their growth occurs during our rainy season. Once established, many survive with rainfall alone. This is the opposite for non-native, ornamental landscapes that grow slowly, or not at all during winter, but require irrigation throughout the summer.

- Group plants with similar watering needs together, and install water-saving irrigation systems (drip, micro-sprayers) to apply the correct amount for each *hydro-zone* or plant grouping. Trees require deep irrigation and may need separate irrigation lines.
- Readjust your irrigation schedule for season and weather conditions. Turn off automatic systems when it's raining. Don't run sprinklers when the wind is blowing. Water deeply and only when needed. Water plants in the early morning or evening. Adjust irrigation systems to water soil, not concrete and pavement.
- Apply mulch (bark, compost, sawdust, gravel) to reduce evaporation from the soil surface and to control weeds.

For information about conserving water in landscapes and using native and drought tolerant plants, refer to plant databases, such as the one at bewaterwise.com. The website will also help you create a customized watering schedule for your yard. (See the *Resources Directory* insert for booklist and websites.)

*Not all native plants are dormant during summer: local riparian plants are the exception. They need water year round, as they are suited for waterways. Streamside vegetation, along dry or flowing waterways, is referred to as riparian.

# Fire-wise Landscaping

Create a minimum distance of 100 ft. of *defensible space*, a landscape that deprives fire of fuel. Use fire-resistant plants and remove plants that are highly volatile.

## Zone 1: Lean, Clean and Green

Zone 1 is from 0-30 ft. out from buildings. (See diagram on prior page.)
Grow plants that are small or succulent, such as irrigated lawns or ground covers and low growing, high-moisture shrubs. If you use native plants, use those that can be trimmed back during the dry season or that stay small with little trimming. Native plants that tolerate summer watering (see native plant lists) should be kept well hydrated.*

- Keep plants well hydrated to help them resist fire. Well-trimmed and watered plants are less likely to ignite than desiccated plants that have a buildup of dry stems and leaves.
- Fire needs fuel to burn, so remove any unnecessary plant materials. Prune dead wood and clean the landscape of dead plants, dry leaves, dry brush, firewood, and combustibles.
- Strategically place hard surfaces in your landscape, such as concrete, brick, or stone patios, driveways, pools, walls, and non-flammable decks, to interrupt the spread of fire to buildings.

## Zone 2: Reduced Fuel

Create the reduced fuel zone beginning 30 ft. from buildings and extending 100 ft. or more, depending on steepness of slope and type/density of vegetation.

- Selectively remove large shrubby plants and dense groupings. Thin overcrowded plants. Mow grasses and weedy vegetation while they are green.
- Carefully remove excess plants without disturbing the soil; mow instead of disc, to prevent erosion and invasion of non-native plants.
- In chaparral plant communities, after thinning, reduce old, woody growth by cutting plants to their bases every few years, during the summer dormancy. Young plant tissues have higher moisture content and are less flammable. The heavy pruning eliminates mature, highly flammable vegetation but maintains root systems to protect the soil from erosion.
- Low branches and plants growing under trees create “ladders” for fire to climb. Eliminate ladder fuels, plants that serve as a link between grass and treetops. Prune the lower branches from the lower 1/3 of trees and shrubs. For trees or shrubs taller than 18 feet, prune the lower branches 6 feet above the ground. Remove dead leaves, twigs, and branches.
- In general, remove shrubs that are growing below trees, unless there is a space between the top of the shrub to the lowest branch of the tree that is three times the height of the shrub.

Remove plants that ignite easily and burn hot, such as those with volatile oils (sages) and those that accumulate fine woody branches or many small, dry leaves (chamise). In Zone 1, remove highly volatile plants (partial list below). In Zone 2, remove or widely space volatile plant types, including:

Chamise, *Adenostoma fasciculata*
Brittlebrush, *Encelia farinosa*
California buckwheat, *Eriogonum fasciculatum*
White sage, *Salvia apiana*
Some Eucalyptus and Acacia

Black sage, *Salvia mellifera*
Woolly blue curls, *Trichostema lanatum*
Mountain blue curls, *Trichostema parishii*
Red Shank, *Adenostoma sparsifolium*
All Pine, Cypress, Juniper, and Cedar species.

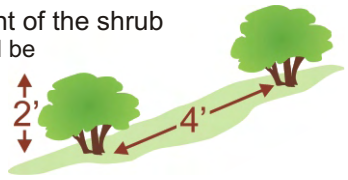
*For best results with native plants, water on overcast days during summer and fall.

## Create Space Between Plants

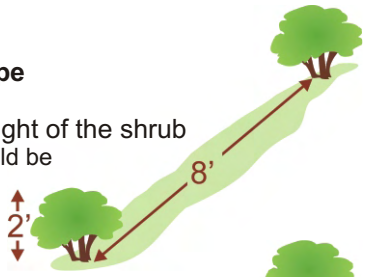
### Shrubs

From edge of one shrub to the edge of the next.

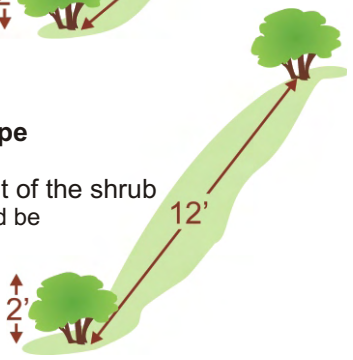
**Flat to mild slope**
(0% to 20% slope)
Two times (2x) the height of the shrub
(Two shrubs 2' high should be spaced 4' apart)




**Mild to moderate slope**
(20% to 40% slope)
Four times (4x) the height of the shrub
(Two shrubs 2' high should be spaced 8' apart)



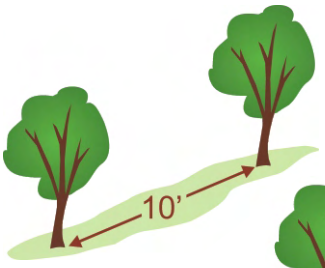

**Moderate to steep slope**
(greater than 40% slope)
Six times (6x) the height of the shrub
(Two shrubs 2' high should be spaced 12' apart)



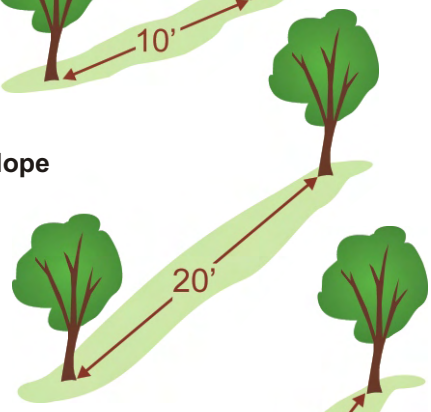

### Trees

From edge of one tree canopy to the edge of the next.

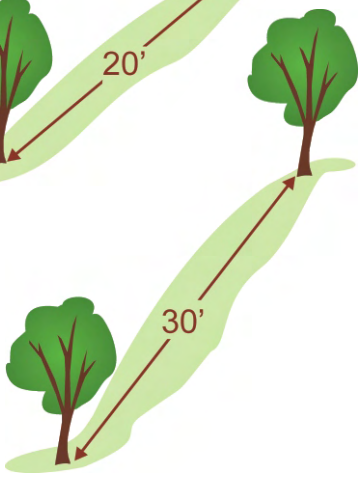
**Flat to mild slope**
(0% to 20% slope)




**Mild to moderate slope**
(20% to 40% slope)




**Moderate to steep slope**
(greater than 40% slope)




Horizontal clearance information from the California Department of Forestry and Fire Protection.

**Prevent erosion and stabilize eroding areas.** If you have exposed soil surfaces, cover with mulch, and landscape as soon as possible. (Plants break the impact of falling rain, and their roots hold soil in place.) Eroding soil becomes sediment in runoff water, which pollutes waterways. Disturbed soil also encourages the growth of non-native weed species.

Retain thinned, deep-rooted native plants to anchor the soil and maintain slope stability. Generally, tall plants have deep, broad root systems. A goal of fire-wise landscaping is to maximize rooting depth while minimizing fuel volume.



Diana Ruiz

For site-specific advice, contact your local Resource Conservation District (RCD) or the USDA Natural Resources Conservation Service (NRCS). For recommendations of native grasses for erosion control, contact the California Native Grasslands Society. (See the *Resources Directory* insert for contact information.)

# Native Plants for Defensible Space Landscaping in the Inland Empire

If you prefer to create a landscape of native, low water-use plants, use these lists to design a yard that is fire-wise. Maintenance is essential; dead and dry plant material must be removed during dry, summer dormancy. Some native plants cannot tolerate irrigation during their summer dormancy, so may die if watered too frequently. Some need only infrequent, deep watering to remain hydrated during the dry summer and fall. The low-growing, low-fuel volume plants are suitable for Zone 1 (0-30 ft.) and beyond. Larger shrubs and trees, for Zone 2 (30-100+ ft.), must be widely spaced (see diagram on previous page).

## Shrubs for Zone 2

### Shrubs that need or tolerate water during summer.

Carpenteria, *Carpenteria californica*
Western redbud, *Cercis occidentalis*
Toyon, *Heteromeles arbutifolia*
Nevin's barberry, *Mahonia nevinii*
Coffeeberry, *Rhamnus californica*
Golden current, *Ribes aureum.*
California wild rose, *Rosa californica*
Western bridalwreath, *Spiraea douglasii*
Squawbush, *Rhus trilobata*


UDSA-NRCS PLANTS Database
Coffeeberry

### Shrubs that do not usually tolerate water during summer.

#### Low shrubs

Bladder pod, *Isomeris arborea*
Bush monkeyflower, *Mimulus aurantiacus*
Chaparral honeysuckle, *Lonicera subspicata*
Hollyleaf redberry, *Rhamnus illicifolia*
Redberry, *Rhamnus crocea*
Yellow bush-penstemon, *Keckiella antirrhinoides*


Paul Aigner
Yellow bush-penstemon

#### Tall, deep-rooted shrubs that stay green during summer.

Bigberry manzanita, *Arctostaphylos glauca*
Thick-leaved lilac, *Ceanothus crassifolius*
Buck brush, *Ceanothus cuneatus*
Hairy California lilac, *Ceanothus oliganthus*
Mountain mahogany, *Cercocarpus betuloides*
Laurel sumac, *Malosma laurina*
Scrub oak, *Quercus berberidifolia*
Sugarbush, *Rhus ovata*
Lemonade berry, *Rhus integrifolia*
California Flannel bush, *Fremontodendron californicum*


Arlee M.Montalvo
Sugarbush

## Trees for Zone 2

### Trees that tolerate occasional water during summer.

Catalina cherry, *Prunus illicifolia* ssp. *Lyonii*
Coast live oak, *Quercus agrifolia*
Valley oak, *Quercus lobata*
Engelman oak, *Quercus engelmannii*

### Trees that need water during summer.

Big leaf maple, *Acer macrophyllum*
White alder, *Alnus rombifolia*
So. California walnut, *Juglans californica*
California sycamore, *Platanus racemosa*
California black oak, *Quercus kelloggii*
Canyon live oak, *Quercus chrysolepis*
Willows: *Salix laevigata, S. gooddingii*
California bay laurel, *Umbellularia californica*


J. S. Peterson @ UDSA-NRCS
Big leaf maple

## Low-growing, (low fuel volume) Plants for Zones 1 and 2

### Perennial herbs that tolerate or need water during summer

Yarrow, *Achillea millifolium*
Columbine, *Aquilegia formosa*
Douglas iris, *Iris douglasiana*
Deer grass, *Muhlenbergia rigens*
Calif. blue-eyed grass, *Sisyrinchium bellum*
Meadow rue, *Thalictrum fendleri* var. *polycarpum*
Yerba mansa, *Anemopsis californica*
Coral bells, *Heuchera* ssp.
Common monkey flower, *Mimulus guttatus*
Scarlet bugler, *Penstemon centranthifolius*
California goldenrod, *Solidago californica*
Hedge nettle, *Stachys bullata*
Slender sedge, *Carex praegracilis*
Narrow-leaved milkweed, *Asclepias fascicularis*


Arlee M.Montalvo
Narrow-leaved milkweed

### Succulents, Ground Covers, and Low Shrubs

**Keep hydrated; if needed, water monthly during summer.**

San Diego sedge, *Carex spissa*
Wild lilac, *Ceanothus griseus 'horizontalis'*
California fuchsia, *Epilobium canum =Zauschneria*
Golden yarrow, *Eriophyllum confertiflorum*
Lance-leaved live-forever, *Dudleya lanceolata*
Chalk dudleya, *Dudleya pulverulenta*
Parry's nolina, *Nolina parryi*
Creeping sage, *Salvia sonomensis*
Creeping snowberry, *Symphoricarpos mollis*
Chaparral yucca, *Yucca whipplei = Hesperoyucca whipplei*
Valley cholla, *Opuntia parryi*
Coastal prickly pear, *Opuntia littoralis*


Arlee M.Montalvo
Chaparral yucca

### Annuals or summer-dormant perennials

**No need for water during summer. There is little, if any, plant material above ground to burn.**

California poppy, *Eschscholzia californica*
Larkspurs, delphinium, *Delphinium parryi, D.cardinale*
Wild Canterbury-bell, *Phacelia minor*
California figwort, *Scrophularia californica*
Baby blue eyes, *Nemophila menziesii*
Royal penstemon, *Penstemon spectabilis*
Lupine, *Lupinus* species *(L. bicolor, L. succulentus, L. truncatus, L. sparsiflorus*)


Arlee M.Montalvo
Baby blue eyes

## Habitat Land Stewards

If you live near conservation easement land or a waterway, there are ways that you can help. Be observant of activities that might be harmful to your nearby habitat lands, or form a *habitat-watch* group in your neighborhood. Like a neighborhood-watch, property owners help look out for neighborhood habitat and waterways, report illegal activity, and help educate neighbors about human impacts. For help forming a *habitat-watch* group, contact your local Resource Conservation District or the Riverside Land Conservancy.

RCRCD
RIVERSIDE-CORONA RESOURCE CONSERVATION DISTRICT

This publication was developed by the Riverside-Corona Resource Conservation District. www.RCRCD.com
1-07

All programs and services are provided without regard for race, religion, gender, national origin, and handicap.
Printed on recycled paper

## Helpful telephone numbers and links:

### Riverside County Water Agencies

| | |
|---|---|
| City of Banning | (951) 922-3130 |
| City of Beaumont/Cherry Valley | (951) 845-9581 |
| City of Blythe | (760) 922-6161 |
| City of Coachella | (760) 398-3502 |
| City of Corona | (951) 736-2263 |
| City of Hemet | (951) 765-3710 |
| City of Norco | (951) 270 5607 |
| City of Riverside Public Works | (951) 351-6140 |
| City of San Jacinto | (951) 654-4041 |
| Coachella Valley Water District | (760) 398-2651 |
| Desert Water Agency (Palm Springs) | (760) 323-4971 |
| Eastern Municipal Water District | (951) 928-3777 |
| Elsinore Valley Municipal Water District | (951) 674 3146 |
| Elsinore Water District | (951) 674-2168 |
| Farm Mutual Water Company | (951) 244-4198 |
| Idyllwild Water District | (951) 659-2143 |
| Indio Water Authority | (760) 391-4129 |
| Jurupa Community Services District | (951) 685-7434 |
| Lee Lake Water | (951) 658-3241 |
| Mission Springs Water | (760) 329-6448 |
| Rancho California Water District | (951) 296-6900 |
| Ripley, CSA #62 | (760) 922-4951 |
| Riverside Co. Service Area #51 | (760) 227-3203 |
| Rubidoux Community Services District | (951) 684-7580 |
| Valley Sanitary District | (760) 347-2356 |
| Western Municipal Water District | (951) 789-5000 |
| Yucaipa Valley Water District | (909) 797-5117 |

### REPORT ILLEGAL STORM DRAIN DISPOSAL

1-800-506-2555 or e-mail us at
fcnpdes@rcflood.org

- Riverside County Flood Control and Water Conservation District
  www.rcflood.org

Online resources include:

- California Storm Water Quality Association
  www.casqa.org
- State Water Resources Control Board
  www.waterboards.ca.gov
- Power Washers of North America
  www.thepwna.org

# Stormwater Pollution

*What you should know for...*

## Outdoor Cleaning Activities and Professional Mobile Service Providers



### Storm drain pollution prevention information for:

- Car Washing / Mobile Detailers
- Window and Carpet Cleaners
- Power Washers
- Waterproofers / Street Sweepers
- Equipment cleaners or degreasers and all mobile service providers

# Do you know where street flows actually go?

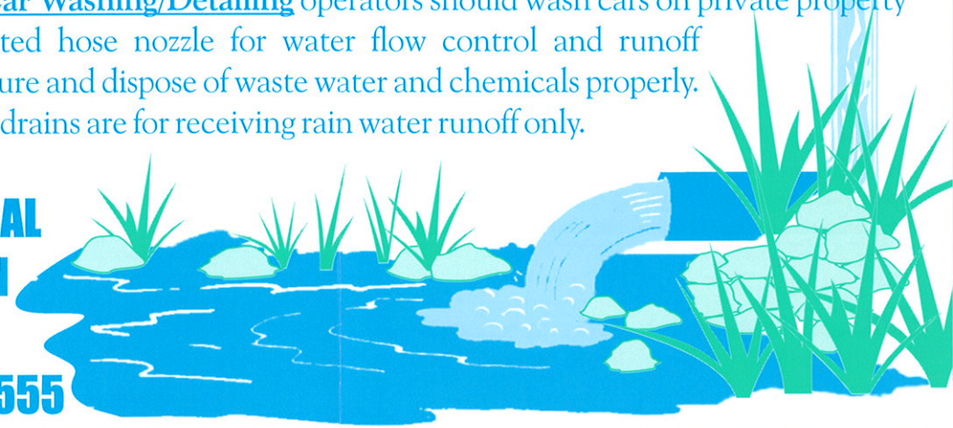
## Storm drains are NOT connected to sanitary sewer systems and treatment plants!




The primary purpose of storm drains is to carry rain water away from developed areas to prevent flooding. Pollutants discharged to storm drains are transported directly into rivers, lakes and streams. Soaps, degreasers, automotive fluids, litter and a host of materials are washed off buildings, sidewalks, plazas and parking areas. Vehicles and equipment must be properly managed to prevent the pollution of local waterways.

Unintentional spills by mobile service operators can flow into storm drains and pollute our waterways. **Avoid mishaps.** *Always* have a **Spill Response Kit** on hand to clean up unintentional spills. Only emergency **Mechanical** repairs should be done in City streets, using drip pans for spills. **Plumbing** should be done on private property. Always store chemicals in a leak-proof container and keep covered when not in use. **Window/Power Washing** waste water shouldn't be released into the streets, but should be disposed of in a sanitary sewer, landscaped area or in the soil. Soiled **Carpet Cleaning** wash water should be filtered before being discharged into the sanitary sewer. Dispose of all filter debris properly. **Car Washing/Detailing** operators should wash cars on private property and use a regulated hose nozzle for water flow control and runoff prevention. Capture and dispose of waste water and chemicals properly. Remember, storm drains are for receiving rain water runoff only.

**REPORT ILLEGAL STORM DRAIN DISPOSAL 1-800-506-2555**



# Help Protect Our Waterways!

## Use these guidelines for Outdoor Cleaning Activities and Wash Water Disposal

**Did you know that disposing of pollutants into the street, gutter, storm drain or body of water is *PROHIBITED* by law and can result in stiff penalties?**

## Best Management Practices

Waste wash water from Mechanics, Plumbers, Window/Power Washers, Carpet Cleaners, Car Washing and Mobile Detailing activities may contain significant quantities of motor oil, grease, chemicals, dirt, detergents, brake pad dust, litter and other materials.

Best Management Practices, or BMPs as they are known, are guides to prevent pollutants from entering the storm drains. ***Each of us*** can do our part to keep storm water clean by using the suggested BMPs below:

## Simple solutions for both light and heavy duty jobs:

**Do...**consider dry cleaning methods first such as a mop, broom, rag or wire brush. Always keep a spill response kit on site.

**Do...**prepare the work area before power cleaning by using sand bags, rubber mats, vacuum booms, containment pads or temporary berms to keep wash water away from the gutters and storm drains.

**Do...**use vacuums or other machines to remove and collect loose debris or litter before applying water.

**Do...**obtain the property owner's permission to dispose of ***small amounts*** of power washing waste water on to landscaped, gravel or unpaved surfaces.

**Do...**check your local sanitary sewer agency's policies on wash water disposal regulations before disposing wash water to the sewer. (See list on reverse side)

**Do...**be aware that if discharging to landscape areas, soapy wash water may damage landscaping. Residual wash water may remain on paved surfaces to evaporate. Sweep up solid residuals and dispose of properly. Vacuum booms are another option for capturing and collecting wash water.

**Do...**check to see if local ordinances prevent certain activities.

**Do not let...**wash or waste water from sidewalk, plaza or building cleaning go into a street or storm drain.




**Report illegal storm drain disposal,**
**Call Toll Free**
**1-800-506-2555**

## Using Cleaning Agents

Try using biodegradable/phosphate-free products. They are easier on the environment, but don't confuse them for being toxic free. Soapy water entering the storm drain system can impact the delicate aquatic environment.



When cleaning surfaces with a ***high-pressure washer*** or ***steam cleaner***, additional precautions should be taken to prevent the discharge of pollutants into the storm drain system. These two methods of surface cleaning can loosen additional material that can contaminate local waterways.

## Think Water Conservation

Minimize water use by using high pressure, low volume nozzles. Be sure to check all hoses for leaks. Water is a precious resource, don't let it flow freely and be sure to shut it off in between uses.

## Screening Wash Water

Conduct thorough dry cleanup before washing exterior surfaces, such as buildings and decks ***with loose paint***, sidewalks or plaza areas. Keep debris from entering the storm drain after cleaning by first passing the wash water through a "20 mesh" or finer screen to catch the solid materials, then dispose of the mesh in a refuse container. Do not let the remaining wash water enter a street, gutter or storm drain.

## Drain Inlet Protection & Collection of Wash Water

- Prior to any washing, block all storm drains with an impervious barrier such as sandbags or berms, or seal the storm drain with plugs or other appropriate materials.
- Create a containment area with berms and traps or take advantage of a low spot to keep wash water contained.
- Wash vehicles and equipment on grassy or gravel areas so that the wash water can seep into the ground.
- Pump or vacuum up all wash water in the contained area.

## Concrete/Coring/Saw Cutting and Drilling Projects

Protect any down-gradient inlet by using dry activity techniques whenever possible. If water is used, minimize the amount of water used during the coring/drilling or saw cutting process. Place a barrier of sandbags and/or absorbent berms to protect the storm drain inlet or watercourse. Use a shovel or wet vacuum to remove the residue from the pavement. Do not wash residue or particulate matter into a storm drain inlet or watercourse.

# Saltwater Pools

- Salt water pools, although different from regular pools, are in fact, sanitized using chlorine. A salt-chlorine generator separates the chlorine and sodium molecules in salt and reintroduces them into the pool water. The same harmful effects of chlorine still apply.
- A salt water pool is still maintained with chemicals such as Muriatic acid, soda ash and sodium carbonate to help keep a proper pH, total Alkalinity, Calcium Hardness and Stabilizer levels.



- It may be illegal to discharge salt water to land. The salt may kill plants and the build-up of salt in soil puts animals, plants, and groundwater at risk. Consult your city representatives to determine local requirements regarding salt water drainage.

**NEVER put unused chemicals into the trash, onto the ground or down a storm drain.**

IMPORTANT: The discharge of pollutants into the street, gutter, storm drain system or waterways - without a permit or waiver - is strictly prohibited by local ordinances, state and federal law. Violations may result in monetary fines and enforcement actions.

# Helpful telephone numbers and links

## Riverside County Water Agencies:

| | |
|---|---|
| City of Banning | (951) 922-3130 |
| City of Beaumont/Cherry Valley | (951) 845-9581 |
| City of Blythe | (760) 922-6161 |
| City of Coachella | (760) 398-3502 |
| City of Corona | (951) 736-2263 |
| City of Hemet | (951) 765-3710 |
| City of Norco | (951) 270 5607 |
| City of Riverside Public Works | (951) 351-6140 |
| City of San Jacinto | (951) 654-4041 |
| Coachella Valley Water District | (760) 398-2651 |
| Desert Water Agency (Palm Springs) | (760) 323-4971 |
| Eastern Municipal Water District | (951) 928-3777 |
| Elsinore Valley Municipal Water District | (951) 674 3146 |
| Elsinore Water District | (951) 674-2168 |
| Farm Mutual Water Company | (951) 244-4198 |
| Idyllwild Water District | (951) 659-2143 |
| Indio Water Authority | (760) 391-4129 |
| Jurupa Community Services District | (951) 685-7434 |
| Lee Lake Water | (951) 658-3241 |
| Mission Springs Water | (760) 329-6448 |
| Rancho California Water District | (951) 296-6900 |
| Ripley, CSA #62 | (760) 922-4951 |
| Riverside Co. Service Area #51 | (760) 227-3203 |
| Rubidoux Community Services District | (951) 684-7580 |
| Valley Sanitary District | (760) 347-2356 |
| Western Municipal Water District | (951) 789-5000 |
| Yucaipa Valley Water District | (909) 797-5117 |

## CALL 1-800-506-2555 to:

- Report clogged storm drains or illegal storm drain disposal from residential, industrial, construction and commercial sites into public streets, storm drains and/or water bodies.
- Find out about our various storm drain pollution prevention materials.
- Locate the dates and times of Household Hazardous Waste (HHW) Collection Events.
- Request adult, neighborhood, or classroom presentations.
- Locate other County environmental services.
- Receive grasscycling information and composting workshop information.

Or visit our
Riverside County Flood Control and Water Conservation District
website at: www.rcflood.org

**Other links to additional storm drain pollution information:**

- County of Riverside Environmental Health: www.rivcoeh.org
- State Water Resources Control Board: www.waterboards.ca.gov
- California Stormwater Quality Association: www.casqa.org
- United States Environmental Protection Agency (EPA): www.epa.gov/compliance/assistance (compliance assistance information)

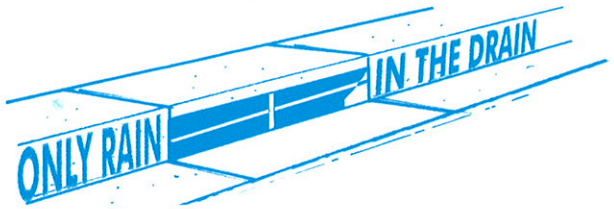
Riverside County's, "Only Rain Down the Storm Drain" Pollution Prevention Program gratefully acknowledges the Bay Area Stormwater Management Agencies Association and the Cleaning Equipment Trade Association for information provided in this brochure.

# Guidelines for Maintaining your...



# Swimming Pool, Jacuzzi and Garden Fountain

# Where does the water go?




Pool, Jacuzzi and Fountain wastewater and rain water runoff (also called stormwater) that reach streets can enter the storm drain and be conveyed directly into local streams, rivers and lakes.



A storm drain's purpose is to prevent flooding by carrying rain water away from developed areas. Storm drains are not connected to sanitary sewers systems and treatment plants!

Wastewater, from residential swimming pools, Jacuzzis, fishponds and fountains, often contains chemicals used for sanitizing or cleansing purposes. Toxic chemicals (such as chlorine or copper-based algaecides) may pollute the environment when discharged into a storm drain system.

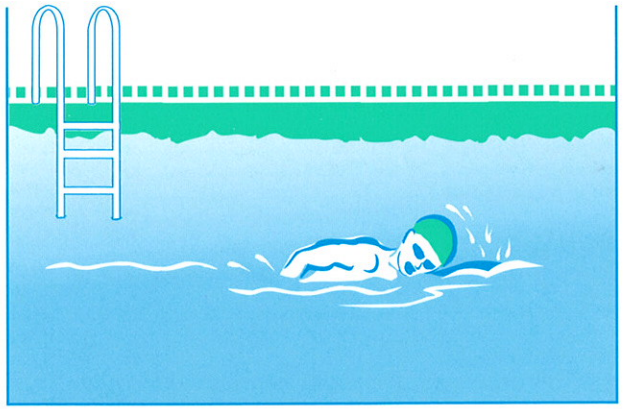
The Cities and County of Riverside have adopted ordinances that prohibit the discharge of wastewater to the street and storm drain system.



# Discharge Regulations

Regulatory requirements for discharging wastewater from your pool may differ from city to city. Chlorinated water should not be discharged into the street, storm drain or surface waters. Check with your water agency to see if disposal to the sanitary sewer line is allowed for pool discharges (see reverse for Riverside County sewer agencies).

If allowed, a hose can be run from the pool Jacuzzi, or fountain to the private sewer cleanout, washing machine drain or a sink or bathtub.



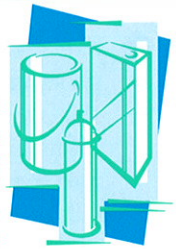
**If you cannot discharge to the sewer,** you may drain your fountain, pool, or jacuzzi to your landscaping by following these guidelines:

**First,** reduce or eliminate solids (e.g. debris, leaves or dirt) in the pool water and allow the chemicals in the pool water to dissipate before draining the pool (this could take up to 7 days, verify using a home pool test kit).

**Second,** slowly drain to a landscaped area away from buildings or structures. Control the flow to prevent soil erosion; it may take more than one day to empty. Do not allow sediment to enter the street, gutter or storm drain.

# Maintenance & Chemicals

## Cleaning Filters



Filter rinse water and backwash must be discharged to the sanitary sewer, on-site septic tank and drain field system (if properly designed and adequately sized), or a seepage pit. Alternatively, rinse water or backwash may be diverted to landscaped or dirt areas. Filter media and other non-hazardous solids should be picked up and disposed of in the trash.

## Algaecides

Avoid using copper-based algaecides unless absolutely necessary. Control algae with chlorine, organic polymers or other alternatives to copper-based pool chemicals. Copper is a heavy metal that can be toxic to aquatic life when you drain your pool.

## Chemical Storage and Handling

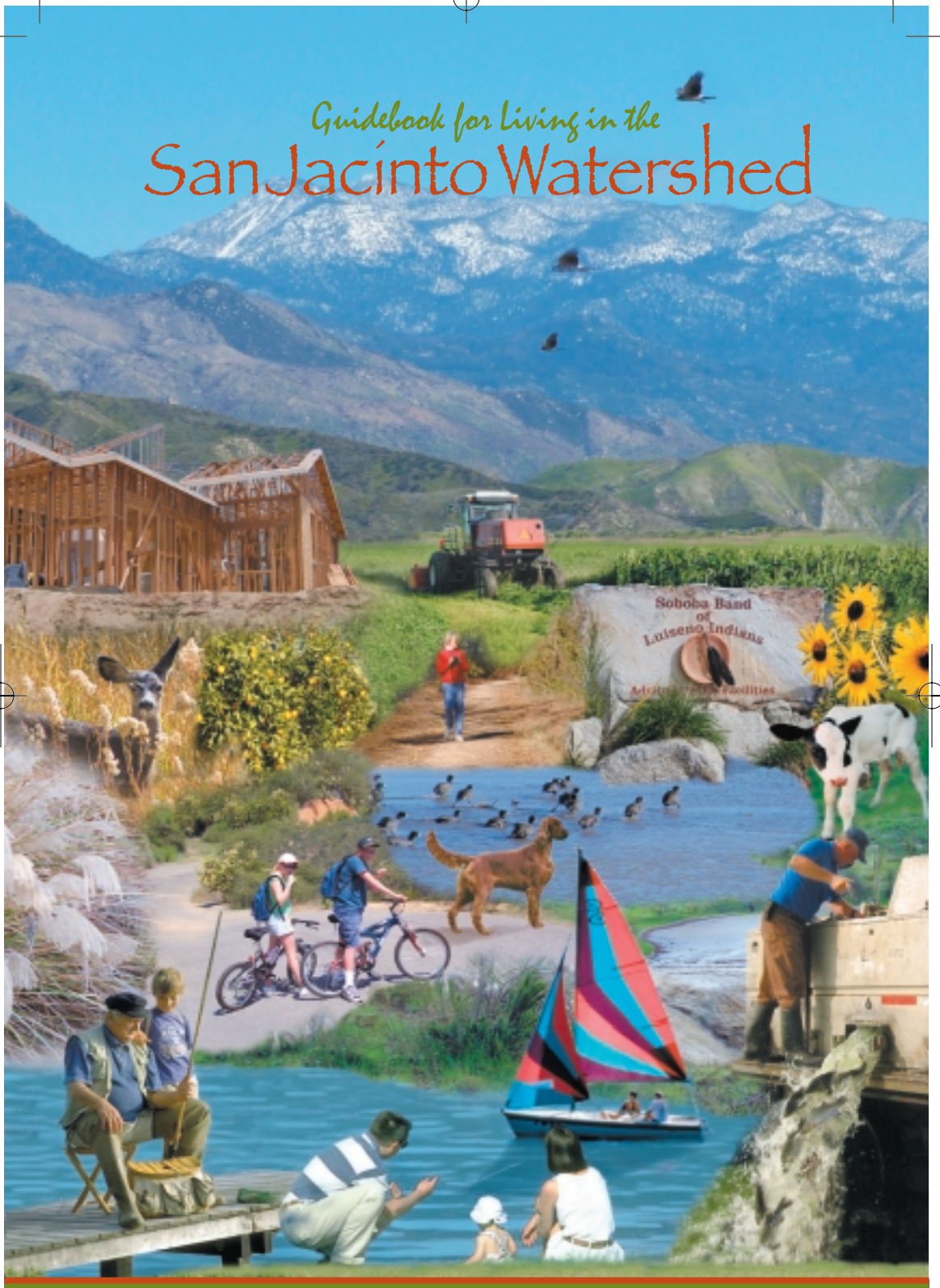
- Use only the amount indicated on product labels
- Store chlorine and other chemicals in a covered area to prevent runoff. Keep out of reach of children and pets.
- Chlorine kits, available at retail swimming pool equipment and supply stores, should be used to monitor the chlorine and pH levels before draining your pool.
- Chlorine and other pool chemicals should never be allowed to flow into the gutter or storm drain system.

Take unwanted chemicals to a Household Hazardous Waste (HHW) Collection Event. There's no cost for taking HHW items to collection events – it's FREE! Call **1-800-506-2555** for a schedule of HHW events in your community.



SJW Guid Ft & Bk Cover 2/14/07 10:58 AM Page 1

# Guidebook for Living in the San Jacinto Watershed




A Guide for Residents of the
San Jacinto Watershed and Surrounding Communities

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The San Jacinto River Watershed Council recognizes the following organizations and agencies as partners in creating *The Guidebook for Living in the San Jacinto Watershed, A Guide for Residents of the San Jacinto Watershed and Surrounding Communities*. From providing funding to lending technical expertise, these organizations have contributed to preserving the natural resources of the San Jacinto Watershed:

Bureau of Reclamation, California Environmental Protection Agency Environmental Justice Small Grants Program • City of Lake Elsinore • Eastern Municipal Water District • Elsinore Valley Municipal Water District • Lake Elsinore and San Jacinto Watersheds Authority • Lewis Planned Communities and the Garrett Group • Milk Producers Environmental Fund • Riverside County Farm Bureau • Riverside County Flood Control and Water Conservation District, Santa Ana Watershed Association, Santa Ana Watershed Project Authority • Soboba Band of Luiseño Indians and Western Municipal Water District.



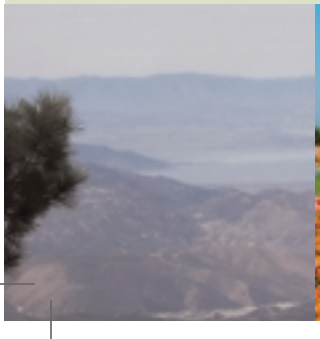
The San Jacinto Guidebook is based upon the Arroyo Seco "Living Lightly in Our Watersheds: A Guide for Residents of Arroyo Seco and surrounding communities." The Arroyo Seco book was based upon earlier concepts from the Topanga Watershed Committee and the Malibu Creek Advisory Council. We wish to thank the Topanga Watershed Committee, the Malibu Creek Watershed Advisory Council, and the Arroyo Seco Watershed Committee.

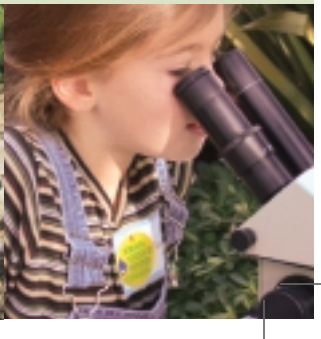
Adaptation of text reprinted from the "Living Lightly In Our Watersheds Guide" with permission from the Arroyo Seco Watershed Committee.

This book is also available in Spanish. Please contact the San Jacinto River Watershed Council for additional information.

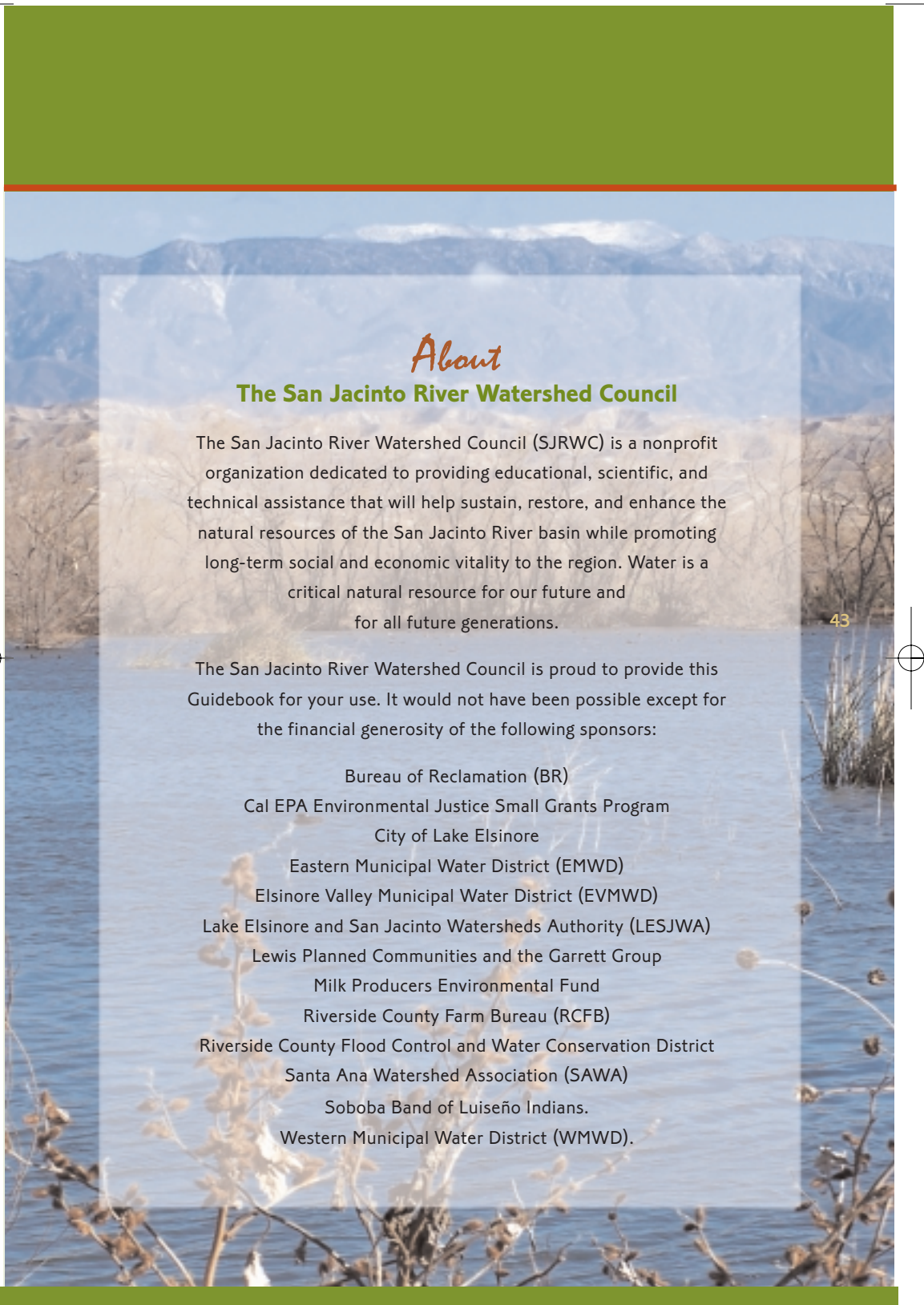
*Prepared by:*
The San Jacinto River Watershed Council

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# About
## The San Jacinto River Watershed Council

The San Jacinto River Watershed Council (SJRWC) is a nonprofit organization dedicated to providing educational, scientific, and technical assistance that will help sustain, restore, and enhance the natural resources of the San Jacinto River basin while promoting long-term social and economic vitality to the region. Water is a critical natural resource for our future and for all future generations.



The San Jacinto River Watershed Council is proud to provide this Guidebook for your use. It would not have been possible except for the financial generosity of the following sponsors:

Bureau of Reclamation (BR)
Cal EPA Environmental Justice Small Grants Program
City of Lake Elsinore
Eastern Municipal Water District (EMWD)
Elsinore Valley Municipal Water District (EVMWD)
Lake Elsinore and San Jacinto Watersheds Authority (LESJWA)
Lewis Planned Communities and the Garrett Group
Milk Producers Environmental Fund
Riverside County Farm Bureau (RCFB)
Riverside County Flood Control and Water Conservation District
Santa Ana Watershed Association (SAWA)
Soboba Band of Luiseño Indians.
Western Municipal Water District (WMWD).

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Guidebook for Living in the

# San Jacinto Watershed

SJRWC

**San Jacinto River Watershed Council**
P.O. Box 1378
San Jacinto, CA 92581-1378

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# Welcome to

The Guidebook for Living in the San Jacinto Watershed

Dear Friends,

There's a spot along the Ernie Maxwell Scenic Hiking Trail, just east of Idyllwild, where much of the San Jacinto River Watershed may be taken in at a single glance. Here in the shadow of Tahquitz Peak, the mountains, ridges and hilltops that form the upper boundaries of our watershed surround you. Lake Hemet and Garner Valley lie just south. Below the Lake lies the canyon of the south fork of the San Jacinto River winding northwest toward the Soboba Indian Reservation, the Badlands and that ephemeral jewel, Mystic Lake. Along the trace of the Canyon and just west of Mystic Lake are the dairy lands and the San Jacinto Wildlife Area, one of the best indicators of the health of our watershed. Further west and just beyond our view lie Canyon Lake and Lake Elsinore, where much of how we all live is reflected in the quality of those aquatic environments.



These stops along the energy highway that comprise our watershed are but a glimpse of the real complexity that underlies the environment in which we all live and work. It's the droplets of water, particles of soil, molecules of oxygen, photons of sunlight, bacteria, insects, flowering plants, birds, mountain lions and all of us – all are related, connected by lifelines and knotted together in a network. We now better understand that when we work together locally for environmental quality, the integrity of the network can be maintained and we can achieve stability, the most fundamental property of a functioning watershed and sustainable communities.

And we have come together: citizens, local, state and federal agencies as members of the non-profit San Jacinto River Watershed Council to coordinate efforts and share resources to develop and implement watershed management strategies that will make western Riverside County a great place to live and work.

This booklet, Guidebook for Living in the San Jacinto Watershed, was developed to inform you of the work of all of our members, what you can do to help reduce pollution and conserve resources, and how you can become involved in and support the work of the Council.

Enjoy!!

Jim Gilmore, President
San Jacinto River Watershed Council

Riverside Office:
4080 Lemon Street, 5th Floor
P.O. Box 1527
Riverside, CA 92502-1527
(951) 955-1010
Fax (951) 955-1019

David P. Stahovich
Maria Brons
Robert Calfva
Sandra Isom

County of Riverside

Supervisor Bob Buster
First District

Lake Elsinore Office:
2499 E. Lakeshore Drive
Lake Elsinore, CA 92530
(951) 471-4270
Fax (951) 471-4288

Wendy Kolk

Dear Friends of the San Jacinto River:

Among the many reasons to reside in or visit Riverside County is the high quality of life available to an active population. Within that portion of just the San Jacinto River Watershed, the variety of activities offered takes a lifetime to enjoy fully. You can hike high in the cool mountains. You can water-ski, fish or sail on several lakes. You can tour public gardens or grow your own flower and herb gardens year-round. You can be as active or passive as you prefer.



The San Jacinto River Watershed has it all. The best way to enjoy your lifestyle is to "live lightly" in our communities. That's what this guidebook offers you—opportunities for enjoyment and the obligation to be part of the conservation ethic that reduces pollution, keeps our air and water clean, and endorses our priority to maintain bountiful green space. We can all do our parts to ensure that the watershed will be a valued destination for new generations.

Many individuals from private, governmental and volunteer organizations contributed their expertise to this guidebook. We know you'll find this guidebook helpful in understanding the San Jacinto River Watershed and appreciating what it has to offer.

Sincerely,

Bob Buster, Chairman
Supervisor, First District

Jeff Stone
Supervisor, Third District

Marion Ashley
Supervisor, Fifth District

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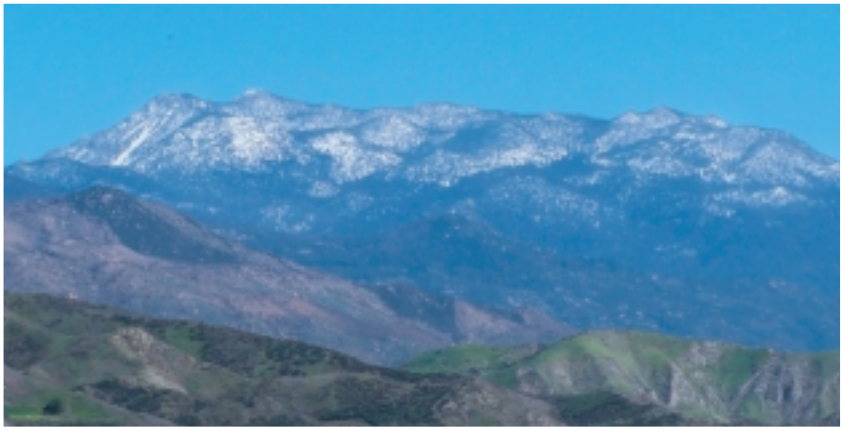
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## *Imagine* The San Jacinto Watershed

*as a clean and protected environment that is the source of community pride. Parks, bicycle trails, places to walk under a green canopy of trees, clean air, water and wildlife habitat are all a part of what the future holds for the watershed.*

*With your support, the vision is becoming a reality.*





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# What is a Watershed?

A watershed is an area of land from which all rainfall drains to a common point. All land is part of a watershed. As rainwater and melting snow run downhill, they carry sediment and other materials into our streams, lakes and groundwater.

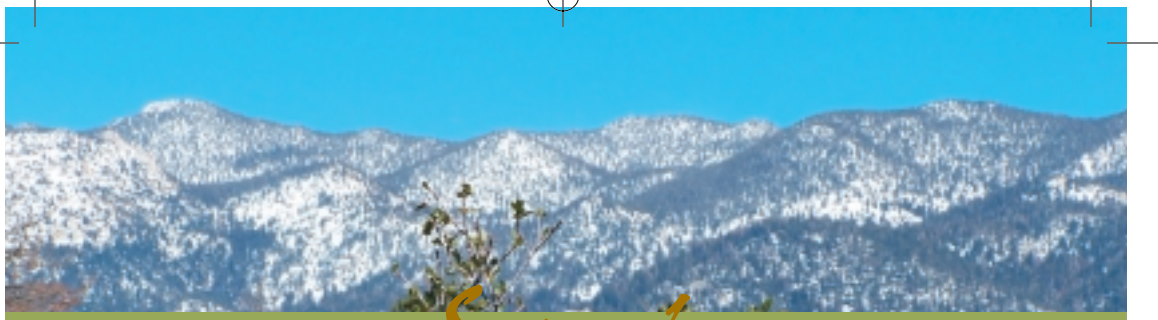
The San Jacinto Watershed upstream of Canyon Lake covers 718 square miles in the western half of Riverside County. There are two main watercourses in the watershed, San Jacinto River and Salt Creek.

The San Jacinto drains the western slopes of the San Jacinto Mountains and flows through the communities of San Jacinto and Perris before entering Canyon Lake. Salt Creek is tributary to the San Jacinto River and flows into Canyon Lake from the east. Discharges from the Canyon Lake Dam flow southwest in the San Jacinto River to Lake Elsinore and, then flows northwest in Temescal Wash to the Santa Ana River, which flows to the Pacific Ocean.





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# Section 1

## OUR WATERSHED

The earth's surface acts as an amazing sponge and filter, allowing moisture, minerals, and organic materials to be used and reused by all life. In developing our cities and communities, we have changed the underlying conditions of the land on which they are built. Where once water, air, and nutrients could enter the soil and circulate freely, we now have increasingly larger areas of hard surfaces that rapidly concentrate rain and pollutants. We have also introduced plants and animals into areas where they were not previously found , thus dramatically changing the make-up of our region's biological communities. Learning to work with the natural cycles that have sustained the earth will help ensure that food, clean air, and water, and beautiful green open space will be available to future generations.

*"To keep every cog and wheel is the first precaution of intelligent tinkering."*

*– Aldo Leopold*

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## A Watershed Approach

*People working together to protect public health and the environment - community by community, watershed by watershed.*

*Carol M. Browner, Administrator*
*U.S. Environmental Protection Agency*
*June 1996*

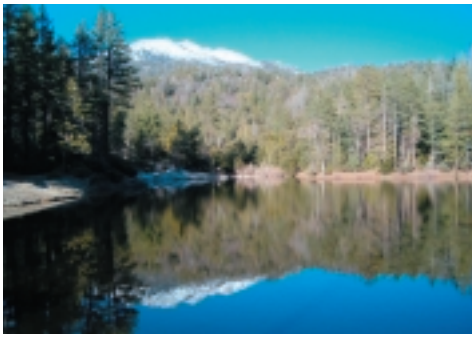


Mystic Lake after a large storm event

Rainfall travels from the mountains to the ocean. Water, air, plants and animals move freely across political boundaries. Strategies for improving water quality and availability, increasing flood protection, protecting our lakes and preserving open space for recreation and wildlife are more effective when pursued collectively over a whole watershed. Agencies, organizations, politicians, and individuals should cross over city lines, joining together with neighbors in their watersheds to work toward these important goals. This watershed-based approach not only promises better and more cost-effective results, it also serves to unite neighborhoods, further enriching our lives.



To this end, The San Jacinto River Watershed Council has produced this environmental guide, *"Guidebook for Living in the San Jacinto Watershed,"* for communities in and around the San Jacinto watershed.



Foster Lake

**CONTACT**

**FOR MORE INFORMATION ON WATERSHEDS:**

- The San Jacinto River Watershed Council- www.sawpa.org/sjrwc/
- LESJWA- www.mywatersheds.com

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## The San Jacinto Watershed

The San Jacinto Watershed is a 780 square mile watershed with diverse and unique geographical, cultural, and ecological significance. Let's take a journey (see map page vi) to better understand how water flows through our watershed.

At the top of our watershed, in the San Jacinto Mountain communities of Idyllwild, Pine Cove Fern Valley and Garner Valley, rain and snow fall on steep, rocky slopes. Water and sediments wash from the slopes, and move down the mountain and canyons into the headwaters of the San Jacinto River. Lake Hemet, on the South Fork of the river, captures significant quantities of mountain runoff. In wetter years, Lake Hemet overflows, drastically increasing the flow in the river as it exits the mountains into the San Jacinto Valley near the community of Valle Vista.

East of the city of San Jacinto, in the rolling foothills of the San Jacinto Mountains, is the 7,000 acre Soboba Indian Reservation, home of the Soboba Band of Luiseño Indians. The reservation extends into the broad level floodplain at the southeast edge of the San Jacinto Valley. Two other mountain streams, Indian Creek and Poppet Creek, flow through the reservation. Water is and always has been a cornerstone of the Soboba band.

The San Jacinto Valley holds a rich and diverse agricultural history. On the south end of the valley are several thousand acres of citrus orchards located in the foothills near Bautista Creek. On the northern half of the San Jacinto Valley the San Jacinto River flows through a large dairy and agricultural community. In the early 1900's, farmers co-opted in building a leveed diversion channel to keep the river from flooding into a large depression at the north edge of the valley known as Mystic Lake. During heavy storm events the levees are overwhelmed, and the river breaks out to flow into Mystic Lake.

Today, Mystic Lake is part of the 19,100 acre San Jacinto Wildlife Area owned by the California



The 8,828-foot Tahquitz Peak, a granite dome in the San Jacinto Wilderness is a favorite with climbers.





Soboba Pow wow



Argriculture in the San Jacinto Valley

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Department of Fish and Game. This conservation area is comprised of the 9,100 acre Potrero Unit, on the Potrero Creek Drainage east of Lamb Canyon Road, and the 10,000 acre Davis Road Unit, which surrounds Mystic Lake in the northern San Jacinto Valley. When Mystic Lake fills and overflows just east of Lake Perris, water flows into the lower reach of the San Jacinto River, which cuts southwesterly across the Perris Valley. Urban runoff from Moreno Valley, Perris, and the communities of Lakeview, Nuevo, Romoland adds to the flow of the water in the river as it makes its way westward toward Canyon Lake.

Salt Creek, a major San Jacinto River tributary, collects runoff from the southern portion of our watershed which includes Hemet, San Jacinto, and the Winchester, Menifee Valley, and Sun City communities. These flows are conveyed to the east bay of Canyon Lake. Runoff from communities near Quail Valley also flows into Canyon Lake.



Canyon Lake, surrounded by a private gated community, flows over its dam during moderate and wet storm seasons. Spillway flows then traverses a short reach of the San Jacinto River within Railroad Canyon until they reach the river's final destination - Lake Elsinore. Lake Elsinore, with the spectacular Cleveland National Forest as a mountain backdrop, is the largest natural freshwater lake in Southern California.

On average, every 7 to 14 years, large storm events occur on our watershed. Spectacular views of the river result, but also flooding. Sediment and pollution, if not controlled, move down its course, seriously impacting the health of the downstream lakes. It is with this in mind that we remind everyone to treat this naturally fragile watershed system with care and respect as you enjoy its miles of ever changing beauty.



Duck pond on the San Jacinto Wildlife area.



Railroad Canyon Lake Dam, built in 1928, created Canyon Lake, a water supply reservoir.



Lake Elsinore with the Cleveland National Forest as a mountain backdrop.

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## Parks and Public Space

The quality of life for the residents who call the San Jacinto watershed their home relies upon the presence of beautiful, peaceful parks, and abundant open space.



Fishing at Lake Perris.

### WHAT YOU CAN DO

**to keep our parks safe and beautiful:**

- Keep your dogs on a leash and clean up after them.
- Do not feed the wildlife. Human food is not healthy for birds, squirrels, and other animals.
- Take only pictures, leave only footprints.
- No fires in undesignated areas. Follow all other local rules and regulations.
- If you live near an open, green space, park or hillside, keep your cat indoors. Chances are they will live longer and the birds, bugs and lizards will thank you!

*Slow down and take some time to get to know and enjoy the treasures of our region.* *See the fold-out map, page vii.*





Lake Perris State Recreation Area and the San Jacinto Wildlife area are two wildlife treasures in the upper watershed full of outdoor activities for you and your family.



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# Environmental Challenges

## Stormwater Pollution



Trash, bacteria, pesticides, fertilizers and oil wash into streets and storm drains and contaminate our streams, groundwater, and lakes. Fertilizers and other non-natural sources of nutrients such as grass clippings stimulate the growth of plants, disrupt local water- and land-based communities of plants, and cause severe impairment of our lakes. Each person, simply by changing a few every-day habits, can effect positive change across the watershed.

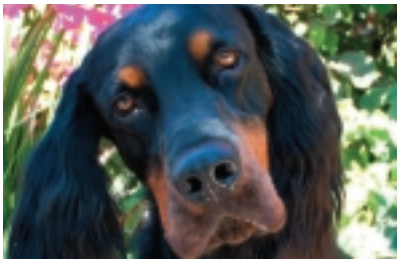
## WHAT YOU CAN DO

**to reduce stormwater pollution:**

- Pick up trash and litter around your yard and home.
- Sweep rather than hose down driveways.
- Reduce use of toxic chemicals in and around your home and use only as directed on the label.
- Dispose of unwanted household hazardous wastes, antifreeze, batteries, oil and paint at official collection stations. Call (800) 506-2555.
- Clean up pet waste.
- Wash your car at a car wash to keep detergents out of the streets.
- Report illegal dumping and stormwater pollution to (800) 506-2555.




## Why clean up after your pet?



Pet waste that is left exposed to the elements eventually washes into the storm drains, channels and creeks and down to the lakes .

**Pet waste degrades the environment and water quality by:**

- Increasing nitrogen and phosphorus in the water, resulting in excessive algae growth.
- Increasing the amount of bacteria and viruses in the water.
- Making neighborhoods and parks less healthy and enjoyable for all users.

*PLEASE CLEAN UP AFTER YOUR PET!*

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## Invasive Plants

Ever since Spanish colonial times, mankind has brought foreign plants, "exotics," to the New World, sometimes by accident, but more usually as fodder or ornament. In our watershed, many drought-tolerant ornamentals are well-behaved, but some escape our yards and create problems. Once growing in the wild, all of them, however attractive, such as Scotch broom in the mountains and fountain grass on the roadside, crowd out native plants to which our native birds and insects are adapted.



A very invasive plant. Arundo Donax

Other plants not only out-compete the natives, but do further damage, Invasive annual grasses grow quickly and dry to tinder, making meadows and scrubland more prone to fire. Eucalyptus grow fast, are brittle, extremely flammable and prone to disease, as are oleanders. Castor-oil plant is poisonous, and tocolote has many irritating burrs.



Tamarisk

Possibly the worst invasives in the watershed are the giant reed, Arundo, and the Tamarisk tree. These water-thirsty foreigners deplete the water table and form monoculture stands where no bird sings. There is a current effort underway – at a cost of millions of dollars – to eradicate Arundo from the Santa Ana and San Jacinto watersheds.



## WHAT YOU CAN DO

**to control invasive plants:**

- Get to know the plants that are problematic in your area and avoid using them.
- Use native plants from our local area. (See page 15 for species.)
- When you see problem exotics for sale in the nurseries, tell them why you want natives instead.

**DID YOU KNOW?**

**The National Parks Conservation Association considers the invasion of national parks by non-native species among the most significant causes of biodiversity loss in parks.**



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# Section 2

## GREEN LIVING

In southern California's gentle weather we are able to live and enjoy much of our lives outdoors. Many of our homes are designed to take full advantage of this gift, with living areas brought outside into the garden and the outdoors carefully framed for viewing from indoors. In the San Jacinto watershed, we share a rich cultural diversity and various lifestyles- mountain communities, rural agriculture influences, and growing urban communities. What a perfect setting in which to consider how the environment is affected daily by the choices we make in building and maintaining our homes, gardens, and style of living.

*"Start by doing what's necessary, then do what's possible and suddenly you are doing the impossible."*

*St. Francis of Assisi*

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# Water Conservation

An effective way to minimize environmental damage and promote a safe and reliable water supply is through conservation. This is particularly important since over half of our drinking water is brought in from distant places such as northern California and the Colorado River. Water conservation efforts add up, reducing our need to import water and increasing the availability and quality of local water resources. Water-conserving appliances and plumbing fixtures save water *and* money.



## WHAT YOU CAN DO

**to conserve household water:**

- Replace high volume flush toilets. *Savings*: up to 8,500 gallons per year for the average single-family household.
- Use a low-flow showerhead. *Savings*: more than 14,600 gallons a year per household.
- When it's time for a new washing machine or dishwasher, buy a water-saving model. Water-wise machines use 1/3 less water and half the energy, and require less detergent and washing additives.
- Fix all leaky faucets and plumbing joints.
- Run your dishwasher and clothes washer only when fully loaded.



### Outdoor Water Conservation

Our yearly rainfall averages from fifteen to twenty inches but can be as little as eight inches. Most rain falls between October and March with long, hot, dry summers. This amount and seasonal cycle of moisture simply cannot sustain most traditional landscapes and lawns. According to the Western Municipal Water District, more than 60% of residential water use is for outdoor landscaping and pools in the inland region.

**CONTACT**

**ASK YOUR CITY OR WATER PROVIDER FOR ADDITIONAL CONSERVATION TIPS AND REBATES**

- Eastern Municipal Water District, www.emwd.org
- Elsinore Valley Municipal Water District www.evmwd.com
- Idyllwild Water District www.idyllwildwater.org
- Lake Hemet Municipal Water District, www.lhmwd.org
- Nuevo Water Company 951-928-1832
- Western Municipal Water District, www.wmwd.org www.bewaterwise.com

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## WHAT YOU CAN DO

**to conserve landscape water:**

- Consider using a weather-based irrigation controller that irrigates according to historic or real-time weather patterns in your neighborhood.
- During the winter, turn your controller off and water only when winter rains are infrequent.
- During the hotter and drier seasons, water less frequently and more deeply to encourage stronger, healthier plants.
- Check for broken and misaligned sprinkler heads often. This problem causes excessive runoff and landscape failures.
- Lawns are very thirsty. Use them for functional areas only.
- Consider using native plants best adapted to the southern California climate. (see page 15).
- Use drip and low-volume irrigation for garden beds and pots. Group plants with similar water needs.
- Sweep paths and driveways rather than using a hose.
- Place mulch and clippings from your own garden around your plants and trees to reduce evaporation and keep the roots cooler.
- Do not cut your lawn too low – taller grass reduces evaporation.
- Water your yard at cooler and less windy times of the day to reduce water loss through evaporation. Early morning is best.



Use drip irrigation.





The beautiful green lawn in front of EVMWD's office is artificial turf. No water required! A great way to conserve water.

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## Landscaping

Another important way to help the environment and save water is by creating a 'California-friendly' yard. There are many drought-tolerant plants that will help with the latter, but amongst these, California natives from local stock have several advantages.

### WHAT YOU CAN DO

- Good habitat for native birds, butterflies and other animals – food, water, shelter and nest materials – is best provided by species that have evolved together. Welcome a wide variety of local wildlife by using native plants.
- Carefully chosen native plants require little or no supplemental water once established. They can co-exist with local pests, so that they seldom need chemical treatments or fertilizer, both of which can pollute. Chemical compounds can endanger your family's health, as well as killing beneficial insects and birds, and cause stormwater pollution.
- Native plants require only an occasional clean-up pruning to thrive.
- Gardening with natives may help support declining local communities if the plants selected are grown from local parent stock – the specialist nurseries mentioned on page 13 can help you with your selection. California has more rare and threatened species than any other state except Hawaii.

### Why Use Natives?

Our sense of belonging increases with an appreciation for the remarkable adjustments the native plants and animals have made to the home we share. The colors of the mountains, slopes and valley – the deep green of the forests, the grey-greens of the sages and the grey-brown of the rocks – all contribute to a special sense of place.



Tortoiseshell Butterfly on Sunflower.



Bee Pollinating Plants.



Toyon

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Compared to natives, exotic plants (from outside our region) have not evolved with our native birds, butterflies and insects. As a result, they can be devastated by pests or disease or, conversely, spread out of control and reduce native diversity. They do not provide the natural food sources that the native plants do for our local insects, and, if these decline, we lose the building blocks of the local food web, causing in turn the decline of the many local birds which depend on them.

### Other Things You Can Do:

- Use permeable surfaces for walkways, patios and driveways that let water soak into the ground; this replenishes the water table and reduce runoff.
- Reduce green waste by choosing plants that will not grow larger than the amount of space you have for them.
- Use clippings from your own garden as use a mulch or in your own compost pile.



Ceanothus, California Lilac



Fremontia



Holly-leaved Cherry



**CONTACT**

- California Native Plant Society www.cnps.org
- Rancho Santa Ana Botanic Garden Claremont (909) 625-8767 www.rsabg.org
- UC Riverside Botanic Gardens Riverside (951) 787-4650 www.gardens.ucr.edu
- Mockingbird Nurseries, Inc. Riverside (951) 780-3571
- Tree of Life Nursery San Juan Capistrano (949) 728-0685 www.treeoflifenursery.com
- Western Municipal Water District Landscapes Southern California Style (951) 789-5987

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### Trees and Urban Forestry



Why are our cities so hot? The average temperatures in cities can be between 2 and 10 degrees hotter than the surrounding countryside. This phenomenon is called the urban heat island effect and is due to the replacement of plants with asphalt, concrete, and building surfaces that absorb and store heat. Planting trees is an effective way to help beautify and cool our cities and homes, reducing our dependence on fossil fuels.

Trees improve air quality by collecting and filtering dust and other pollution particles, absorbing carbon dioxide, and releasing oxygen. They improve water quality and reduce flooding by intercepting rainfall and increasing its absorption into the ground.

## WHAT YOU CAN DO

**to have healthy trees**

- Plan ahead carefully when planting trees, considering the mature size of the tree.
- Allow leaf litter to accumulate and even add more mulch to the surrounding soil, but do not let it pile up against the trunk, which can lead to disease.
- Loosen ties and stakes as soon as you plant, and remove them as soon as possible.
- Protect the trunk from damage, such as from a weed trimmer.
- Never cut main branches or the central stem back to stubs. This practice, though common in our area, severely stresses and can injure a tree.





Trees improve the health of our watershed. Trees increase groundwater infiltration, filter particulates from the air, shade our homes and provide many other benefits.

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## California Native Plants for Your Home Garden:

| COMMON NAME | SCIENTIFIC NAME |
|---|---|
| **Trees** | |
| Western Redbud | *Cercis occidentalis* |
| Western Sycamore | *Platanus racemosa* |
| Coast Live Oak | *Quercus agrifolia* |
| Elderberry | *Sambucus mexicana* |
| California Bay | *Umbellularia californica* |
| Mesa Oak | *Quercus engelmannii* |
| **Shrubs** | |
| Chamise | *Artemisia californica* |
| Manzanita | *Arctostaphylos species eg. glauca* |
| California Lilac | *Ceanothus species eg. crassifolius* |
| California Sunflowers | *Encelia californica or E. farinosa* |
| Fremontia, Flannel Bush | *Fremontodendron californica* |
| Toyon | *Heteromeles arbutifolia* |
| Holly-leafed Cherry | *Prunus ilicifolia* |
| Coffeeberry | *Rhamnus californica* |
| Lemonadeberry | *Rhus integrifolia* |
| Sugar Bush | *Rhus ovata* |
| **Perennials and Groundcovers** | |
| Manzanita (low) | *Arctostaphylos eg. uva-ursi* |
| California Lilac (low) | *Ceanothus eg. 'Emerald Carpet'* |
| California Fuchsia | *Epilobium canum or Zauschneria californica* |
| Wild Buckwheat | *Eriogonum fasciculatum* |
| Coral Bells | *Heuchera species* |
| Douglas Iris | *Iris douglasiana* |
| Sticky Monkeyflower | *Mimulus aurantiacus* |
| Deer Grass | *Muhlenbergia rigens* |
| Showy Penstemon | *Penstemon spectabilis* |
| California Sages | *Salvia apiana or S. mellifera* |
| Wild Grape | *Vitis californica* |
| **Annuals** | |
| California Poppy | *Eschscholzia californica* |
| Arroyo Lupine | *Lupinus succulentus* |
| Desert Bells | *Phacelia minor* |
| Chia | *Salvia columbariae* |

**Note:** *Most of these thrive in Inland Empire sun and with little supplemental water, though many will look better in summer with monthly irrigation in the early morning. Take care, however, some nursery-bred varieties of these species may need regular garden water.*

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### Fire Safety and Fuel Modification

In southern California, fires are always a serious concern. If you live in a canyon or on a slope, the risk is even higher, especially if your property is adjacent to natural space. Be sure to follow local fire department clearance regulations and safety practices.





## WHAT YOU CAN DO

**to reduce fire risk:**

- Keep brush clear around all structures.
- Keep roof and gutters clear of leaves and plants.
- Trim trees away from your roof or chimney.
- Branches should not come within 10' of the house.
- Space trees and shrubs that are near structures.
- Prune tall trees to remove branches near the ground.
- Water plants adequately; water trees and shrubs deeply every 20-30 days during fire season.
- Stack firewood outside.
- Plant fire-resistant plants and trees. Plant a deciduous tree, which will lower the energy bill by shading the house in the summer.
- Stabilize slopes by planting deep-rooted, woody ground covers. Add widely-spaced taller shrubs and trees to maximize slope stability.
- Do not plant Cypress, Eucalyptus, or Junipers close to the house as they contain oils that can cause fire to spread rapidly.



**CONTACT**

- California Dept. of Forestry & Fire Protection, www.fire.ca.gov
- California Fire Safe Council www.firesafecouncil.org
- Firewise, sponsored by the National Wildfire Coordinating Group, www.firewise.org
- Smokey Bear Fire Prevention Materials, www.smokeybear.com

*FOR ALL FIRE EMERGENCIES CALL 911*

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# Air Quality, Automobiles, and Energy

Electricity generation and the use of fossil fuels for transportation are major sources of air pollution in the United States, contributing to smog, acid rain and global warming. One of the single most effective ways to improve air quality and help the environment is to reduce dependence on cars and gasoline. Conservation can make a difference!



Ride a Bike.

## WHAT YOU CAN DO

**to help clear the air:**

- Carpool, ride the bus, walk, or ride a bike.
- Make your next vehicle purchase an electric or a hybrid car.
- Combine multiple errands into one trip.
- Take the kids bicycling, walking or roller-skating to form healthy habits and develop an understanding of the impact their actions have on air quality.
- Turn off all appliances and lights when not in use.
- Change incandescent bulbs to compact fluorescent.
- Install energy-efficient (Energy-Star) appliances.
- Switch to solar energy.
- Plant a tree. Trees lower energy bills by shading the house.
- Install a whole house fan rather than an air conditioner.
- Close curtains on sunny windows to reduce heat gain.
- Minimize use of wood stoves or fireplaces.
- Use a dry cleaner that does not use perchlorate.





CONTACT

**WEBSITES WITH ENERGY SAVING TIPS**

- Flex Your Power
  www.flexyourpower.ca.gov
- Earth911
  www.earth911.org
- US Department of Energy
  www.eere.energy.gov

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## WHAT YOU CAN DO

**to help when you must drive:**

- Make your next vehicle cleaner-fueled and more efficient. Electric, natural gas, and hybrid-electric vehicles pollute less and reduce our dependence on oil.
- Combine multiple errands into a single trip.
- Maintain your vehicle, especially tire pressure. Excessive exhaust is harmful to you and the people around you.
- When getting gas, do not top off your tank and wait before removing the nozzle. Fuel spillage adds to air pollution.
- Park in the shade of a building or tree to reduce the evaporation of gasoline from your car.
- Use your ashtray if you are a smoker. Cigarette butts take up to five years to break down in the ocean and can kill fish, birds, seals, and other marine life.









### Green Electricity

Green electricity is derived from clean, renewable energy sources such as solar, wind, biomass, and geothermal. Most electricity in the United States comes from coal, oil, nuclear, large hydroelectric, and natural gas plants. The burning of non-renewable fossil fuels contributes to air quality problems and global warming.

## WHAT YOU CAN DO

- Use less energy.
- Wear a sweater when it's cool.
- Contact your utility company to learn about your green energy options.
- Let your representatives know that renewable energy sources should be a priority.

**EDUCATE YOURSELF:**

- Go Green Power www.gogreenpower.org
- Global green USA www.globalgreen.org
- GreenE, www.green-e.org
- California Energy Commission www.energy.ca.gov
- US Department of Energy www.eere.energy.gov

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## Buying Green

The best way to reduce our impact on the environment is to limit our use of resources. It is helpful to purchase products whose production and use have a reduced impact on the environment. Small changes by many people can make a big difference!

### WHAT YOU CAN DO

**Purchase products that:**

- Use minimal packaging.
- Contain recycled material.
- Contain raw materials derived from renewable sources.
- Can be reused or recycled.
- Are produced locally.
- Do not use products that require special disposal.

**SAFE ALTERNATIVES TO COMMON HOUSEHOLD CLEANERS**

| Try: | Instead of: |
|---|---|
| • borax and water or baking soda | chlorine bleach |
| • ½ c. vinegar + 1 qt. water | glass cleaner |
| • ½ lemon dipped in borax or baking soda | abrasive cleanser |
| • 1 part lemon juice + 2 parts vegetable oil | furniture polish |
| • toothpaste or baking soda polish | silver polish |

*SOURCE: American Oceans Campaign* (www.americanoceans.org)



Buy local products.



Using recycled water.





Buy local produce.

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## Green Housing Construction



When building or modifying a home keep sound environmental practices in mind. Green construction improves energy efficiency, resource conservation, indoor air quality, and protects the health of your family. In addition to helping the environment, a "green" house can save you money and provide you with a healthier, quieter, and more comfortable home.

### Generally, building greener involves one or more of the following:



- Planning to preserve the natural environment
- Site development which reduces erosion, minimizes paved surfaces, and protects vegetation
- Water conservation indoors and outdoors
- Energy efficiency
- Using recyclable materials and air conditioning costs.



### Permeable Surfaces



Permeable surfaces such as decomposed (crushed) granite, broken concrete, gravel, mulch and grass or other plants allow water to pass through and soak into the soil beneath, as opposed to running off your yard and contributing to stormwater pollution and flooding.

### WHAT YOU CAN DO:

- Use bricks, stones, broken concrete, crushed granite or gravel for driveways, paths, and patios.
- Use a contractor who knows and follows regulations concerning construction runoff. Even a small remodel can contribute a large amount of gravel, dirt, and hazardous materials to the storm drain system.
- Investigate the installation of a 'gray water' system–to collect your household's washing water for re-use in the landscape or for flushing toilets–with your local building department officials to determine if they allow residential use of reclaimed water.

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## WHAT YOU CAN DO:

**to increase sustainability in your home:**

- Add insulation to your home.
- Use innovative, engineered wood products.
- Use recycled-content building materials whenever possible and ask your contractor to recycle their demolition waste.
- Use adhesives, paints, and cleaners with low volatile organic compounds (VOC) to reduce indoor air pollution.
- Use light colored roofing to reduce home heat absorption, or consider new "green roofs."
- Use double-glazed windows to save on heating and air conditioning costs.
- When building a house use the sun. Orient your house and plan your landscaping to take advantage of winter sun and summer shade.
- Use ceiling fans, whole house fans, and attic ventilation to affordably keep your home comfortable.



Light–Tiled roof



Whole–House fan



### Choose a smart sprinkler controller for your home

- A smart sprinkler controller automatically adjusts irrigation schedules in response to changing weather conditions.
- They are also called “weather–based irrigation controllers.”
- Smart controllers are a new technology & can be difficult to find.

*For more information log onto www.bewaterwise.com for a listing of manufacturers & websites*

**LEARN MORE:**

- Ecohome Network www.ecohome.org
- National Association of Home Builders www.nahb.org
- Home Builders Association www.hba.org
- Urban Land Institute www.uli.org/

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# Trash and Recycling



Recycle, Recycle,Recycle.

## Reduce, Reuse, Recycle

As populations grow, cities face increasing problems with waste disposal. Finding ways to dispose of our waste becomes increasingly difficult and expensive. Trash that washes into storm drains is a leading contributor to unhealthy water in our streams, rivers and lakes.

**DID YOU KNOW:**

- Nearly half of the world's annual commercial wood harvest is used to produce paper.
- Recycling aluminum saves 95% of the energy required to produce it from virgin materials.
- Over 30% of California's solid waste consists of organic materials. Most of this ends up in a landfill, even though it could be composted.
- Materials in landfills can take hundreds of years to degrade.
- Although plastic carries a recycling symbol, very little of it is actually recycled. Discarded plastic washes into the ocean and chokes and kills marine animals including turtles, sea horses, fish, seals, and birds.





Be creative – reuse or recycle products. This old tree became a work of art.

Household Hazardous Waste includes metals, chemicals, batteries, and electronics, such as computers and stereos, that can be used or stored in your kitchen, workshop, garage, garden, or bathroom. It is illegal to dispose of household hazardous waste anywhere but at authorized Household Hazardous Waste and/or Antifreeze, Batteries, Oil and Paint (HHW/ABOP) collecton centers. The County of Riverside and local cities sponsor several free collection events throughout the year in the San Jacinto watershed. You can learn more about HHW/ABOP, disposal, and free collection events as www.rivcoeh.org or by calling (800) 506-2555.

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## WHAT YOU CAN DO

**to help reduce waste and consume less:**

- Use canvas bags or re-use plastic bags when shopping.
- Purchase products with minimal packaging material.
- Buy products that use recycled materials.
- Use both sides of paper. Make your own notepads by saving one-sided scrap paper or mail, cutting in half and securing with a re-usable clip.
- Avoid using plastic unless it is something, like a sturdy cup or bag, that you can re-use.
- Recycle.
- Give away or garage sale useful unwanted items.
- Dispose of hazardous household waste properly (call 800-506-2555 for HHW/ABOP disposal days). Remember that this includes paint, many common cleansers, car fluids, and electronic equipment.
- Use tap water or wash, refill, and reuse water bottles.
- Join a neighborhood clean-up.
- PUT IT IN THE CAN! Pick up a little litter wherever you are, whether in the city or on the trail.

**to help reduce green waste:**

- Leave grass clippings on your lawn, sometimes called “grasscycling”. They provide important nutrients and reduce water loss.
- Choose plants that will be the desired size at maturity to minimize pruning.
- Compost garden and household fruit and vegetable waste.
- Chip clippings, prunings, and raked leaves. They all make great mulch.



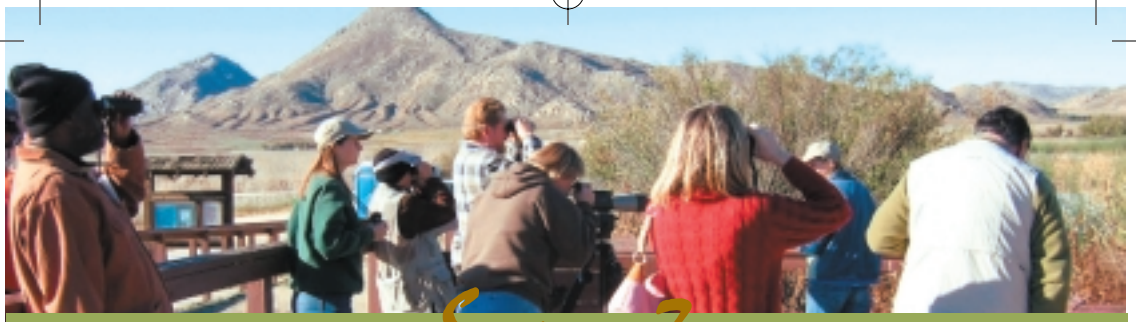









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# Section 3

## GET INVOLVED

The following is a list of some of the local environmental organizations and exciting things that are happening in and around the San Jacinto watershed. As a volunteer, you can take direct action to preserve the quality of life for our communities and the natural beauty and benefits of our watershed. Stay aware of what is being planned for the future of your own neighborhood and express your opinions.

*"Never doubt that a small group of thoughtful, committed individuals can change the world, indeed it's the only thing that ever has."*

*– Margaret Mead*

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## Volunteer Opportunities



**California Native Plant Society**
Preservation of native plants and habitat, www.cnps.org.

**Center For Community Action and Environmental Justice**. P.O. Box 33124 Riverside, CA 92519
Ph. (951) 360-8451, http://www.ccaej.org/

**Friends of the Northern San Jacinto Valley**
Hiking, reforestation, park clean ups
P.O. Box 9097, Moreno, Valley 92552
Ph. (951) 928-3698, http://www.northfriends.org/



**Friends of Nuevo Community Council**
PO Box 647, Nuevo CA 92567
http://www.foncee.net/, and info@foncc.net

**Lake Elsinore Citizen Committee,** Contact: Donna Frances, Ph. (951) 674-1989. Lake Elsinore, *focuses on the recreation and preservation of the lake.





**National Wildlife Federation**
Backyard and schoolyard habitat program, www.nwf.org.

**San Bernardino Valley Audubon Society**
P.O. Box 10973, San Bernardino, CA 92423
http://www.sbvas.org

**San Jacinto River Watershed Council**
Non-profit watershed council
Contact: Pat Boldt, Ph. (951) 808-8531

**Santa Rosa Plateau Ecological Reserve/Nature Conservatory**, Location: outskirts of Murrieta
Contact: Carol Bell, Ph. (951) 677-6951

**Santa Ana Watershed Association,** Education, cleanups, Contact: Renee Latu (909) 799-7407 Ext. 105

**Sierra Club**
San Gorgonio Chapter of environmental activism, hiking,
4079 Mission Inn Ave., Riverside, CA 92501
Ph. (951) 684-6203
http://www.sangorgonio.sierraclub.org/

**Western Riverside County Agriculture Coalition**
Coalition addresses agricultural environmental issues in the watershed. Comprised of agricultural operators, dairy, and land owners. Contact: Bruce Scott
Ph. (951) 654-5096 or wrcac_mail@yahoo.com

# What's Happening in and Around Your Watershed

There are many exciting things happening in and around your watershed. Here are several important developments and projects.

## The San Jacinto River Watershed Council

The San Jacinto Watershed Council, a 501 (c) 3 non-profit, grass roots organization, is an open forum of the entire watershed, upper and lower, and strives to represent all stakeholders. The Council Board consists of water agency, County, federal/regional, tribal, dairy, agriculture, environmental and 2 at-large representatives. The Council may be characterized as broad-based in its representation and holistic in its approach to issues of watershed management and planning. Current activities include:

- Prop 50, Chapter 8 Planning Grant for the Development of an Integrated Regional Watershed Management Plan for the San Jacinto Watershed (funded by the State of California, Department of Water Resources)
- Assistance with TMDL Implementation (page 28)
- Education and Outreach…this Guidebook!
- Applying for grants that will help address water resource and water quality problems
- Coordination and integration of other regional studies and plans, and their impacts on the watershed.
- Development of work groups to address critical issues
- Assist development of strategies to control nutrients and pathogens negatively impacting water bodies.

*For more information visit our website at* www.sawpa.org/sjrwc/, or contact Pat Boldt, SJRWC Executive Director at Mpboldt@aol.com.



San Jacinto River Watershed Volunteer opportunities




Prop 50 Planning Grants.



The San Jacinto "GAP" area.

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## What is a TMDL?

In our watershed, there are two impaired lakes that do not meet expected water quality standards. Under the Clean Water Act, the Santa Ana Regional Water Quality Control Board (RWQCB) has identified Canyon Lake and Lake Elsinore as needing water quality improvement. Excessive nutrients and pathogens are the primary problems affecting the lakes.

To control the level of nutrient and pathogens entering the lakes, RWQCB has established a new water quality regulation called a Total Maximum Daily Load (TMDL). The TMDL provides an assessment and planning framework for identifying nutrient and pathogen sources, achieving load reductions, and taking actions that are needed to attain the water quality standards. The TMDL also sets target dates for when the water quality standards must be met and an implementation plan to attain it. By compliance to these water quality standards, aquatic life, drinking water and other beneficial uses at the lakes will be protected.

A stakeholder TMDL Task Force has been formed to address the TMDL's affecting our watershed. Specific tasks have been identified to start the process of improving water quality in these two lakes and work is underway. However, the solution will ultimately be dependent on controlling watershed residents contributions of nutrients and pathogens to the lakes.

If you would like additional information regarding the TMDL, please visit www.mywatersheds.com.



Stocking fish in Lake Elsinore.



Lake Elsinore



Canyon Lake



The goal of the TMDL is to restore benefical uses to Canyon Lake and Lake Elsinore.

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## The Multi-Species Habitat Conservation Plan

When Western Riverside County revised its General Plan, the Multi-Species Habitat Conservation Plan (MSHCP) was an important part. Finalized in June 2004, it aims to address the dissatisfaction that all sectors of our County felt with the long and complicated process developers had had to go through to get clearance to build, and the haphazard way species were protected.

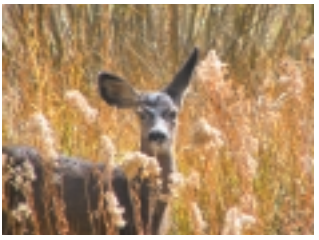


Certain areas are considered important to keep as open space, besides those lands already in public hands. This conserves the habitats for some of our most beautiful and threatened species of wild life and to provide linkages among the conserved areas.



The San Jacinto River is a vital corridor in this Habitat Conservation Plan. Starting in the San Jacinto mountain range, it passes through the Mystic Lake wetlands, then agricultural flood plain, which has been for centuries home to native creatures and the hawks and owls that prey on them. The river flows to the base of the Cleveland range and then, into Lake Elsinore, which is gradually being restored as home for native fish and recreation for humans.





As development continues in our watershed, we must ensure that enough of the “criteria areas” of the MSHCP are conserved, to ensure that our river continues to meander in winter across the valley, nourishing rare plants that are found nowhere else, providing a haven for large and small wildlife, and replenishing our underground water.



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### Lake Elsinore And San Jacinto Watersheds Authority

LESJWA improves and maintains the waters within Lake Elsinore, Canyon Lake, and the San Jacinto River Watershed.

LESJWA's membership includes representatives from five member agencies in the area (listed below) working together to improve water quality at Lake Elsinore and Canyon Lake.

- Santa Ana Watershed Project Authority
- City of Lake Elsinore
- City of Canyon Lake
- Elsinore Valley Municipal Water District
- County of Riverside

A few of LESJWA's projects are as follows:



LESJWA's mascot Bessie the Bass explains what a watershed is at the Temecula Water Festival.



Dredging machine at Canyon Lake



Island Wells water flow at Lake Elsinore.

### LAKE ELSINORE

- **Supplemental Lake Water** – Improvements made to existing lake supply wells and recycled water treatment will provide supplemental water that will replenish low lake water levels, when necessary.
- **Lake Mixing System** – Large amounts of algae in Lake Elsinore decrease healthy oxygen levels, in turn killing fish and damaging recreational opportunities. Lake mixing helps evenly distribute oxygen throughout the lake to keep it vibrant and healthy.
- **Aeration System** – This subsurface aeration system bubbles air into the water column from pipes on the bottom of the lake to increase lake oxygen levels, which helps lower the amount of algae throughout the lake.
- **Carp Removal** – Carp is a bottom dwelling fish that stirs up silt and unwanted nutrients from lake floors that contribute to the growth of alga blooms which can be harmful to water quality. The removal of carp is vital to the overall health of a lake.

### CANYON LAKE

- **Dredging System** – Dredging removes sediment levels from the lake bottom with the use of a self-propelled platform whose suction vacuum sweeps the bottom of the lake floor which improves water quality and water supply.

*For additional information visit www.mywatersheds.com*

## Ten Fun Ways to Enjoy your Watershed

1. **Take a Hike**…a jaunt, a trek, a strut…just get out and see, hear and smell the world in your back yard.
2. **Stop and Smell the Roses**…the mountains, the hills, the valley, Lupine, Poppies, and Sage.
3. **Spend Some Quality Time with your Pet**…leash your dog or cat (bring a bag for pet wastes). Ride a horse or a mule! Check out the trails together.
4. **Play in the Garden**…add native plants to your garden—Manzanita, California lilac, Toyon, and Sage. Use biological controls instead of pesticides, Conserve water.
5. **Get Down and Dirty**…volunteer with other organizations. Help plant trees, restore habitat, and clean-up your watershed.
6. **Tap into Watershed Consciousness**… the big picture! Remember your street and storm drains lead to the ocean.
7. **Sing, Shout, Get the Word Out!**…let friends, family and officials know how you feel about preserving and restoring the San Jacinto.
8. **Explore your Watershed**…discover the San Jacinto watershed, all 780 miles of diverse plantlife, animals, its human communities, and wonderful cultural gems.
9. **Plan a Bright Future**…participate in San Jacinto watershed planning efforts. Bring a friend. Log onto www.sawpa.org/sjrwc/
10. **You Can Make A Difference!**…embrace our natural resources. Protect habitat and enjoy your watershed.














I
MAKE
EVERY
DROP
COUNT

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# Section 4

## RESOURCES IN YOUR COMMUNITY

We hope you have found this guidebook educational, informative and full of simple actions that you can take to help protect our water supply and preserve our open spaces for your enjoyment and the enjoyment of future generations. We put together the following resources and contacts to help you become more involved in your communities and in the health of your watershed. Remember that your government representatives at all levels—from local to the national—work for you and want to know what you think—express your opinion!

*"Hope is the thing with feathers - that perches in the soul - and sings the tune without words - and never stops, at all."*

*– Emily Dickinson*

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# Parks and Open Space



## PARKS

**Lake Perris State Recreation Area**
17801 Lake Perris Drive, Perris, CA 92571
Ph: (951) 657-0676
www.parks.ca.gov/default.asp?page_is+651

**Mount San Jacinto State Park**
PO Box 308
25905 Highway 243
Idyllwild, CA 92549
Ph: (951) 659-2607
wilderness permits 951-659-2607
www.parks.ca.gov/default.asp?page_id+36

**The San Bernardino National Forest**
54270 Pinecrest
P.O. Box 518, Idyllwild CA 92549
Ph: (951) 382-2921
wilderness permits 951-659-2117
www.fs.us/r5/sanbernardino
Visitor Information Center
(Corner of Pine Crest and Highway 243 in Idyllwild)
www.parks.ca.gov/default.asp?page_is+651

**San Jacinto Wildlife Area**
PO Box 1254, 17050 Davis Road
Nuevo, CA 92567
Ph: (951) 928-0580

**Riverside County Regional Park & Open Space District**
4600 Crestmore Road, Riverside, CA 92509
Ph: (951) 955-4310
reservations 1-800-234-7275 (park)
www.riversidecountyparks.org/

**McCall Memorial Park**
28500 McCall Park Road
Mountain Center, CA 92561
(951) 659-2311

**Lawler Alpine Cabins (youth group lodging only)**
19751 Hwy 243 Idyllwild, CA 92549
Ph: (951) 955-4397

**Idyllwild Nature Center**
25222 Hwy 243, Idyllwild, CA 92549
Ph: (951) 659-3850

**Idyllwild Park**
5400 Riverside County Playground Rd.,
Idyllwild, CA 92549
Ph: (951) 659-2656

**Hurkey Park**
56375 Highway 74
Mountain Center, CA 92561
Ph: (951) 659-2050

**Simpson Park**
28505 Rawlings Road
Hemet, CA
www.cityofhemet.org/parks.htm#simpson

## Lakes/Recreation Areas





**Diamond Valley Reservoir Recreation Area**
Now open for boaters and anglers. Additional recreational activities are planned. A Visitor's Center highlighting paleontological discoveries and a scenic viewpoint will be open on varying schedules.
Ph: (800) 211-9863 for days, hours and directions.

**Lake Elsinore Recreation Area (LERA)**
The lake offers boating, camping and day use areas.
General Lake information: (951) 674-7730
LERA Campground: Ph: (951) 471-1212
LERA Campground reservations: Ph: (800) 416-6992
Seaport Boat launch: Ph: (951) 245-9308
Camping information: Ph: (800) 416-4992

**Lake Perris State Recreation Area**
Lake Perris offers a variety of water recreation activities including swimming, fishing (shore, pier, and boating), water craft use, sailing, waterskiing and even scuba diving.
17801 Lake Perris Drive, Perris CA 92571
Ph: (951) 657-0676
www.parks.ca.gov/default.asp?page_is+651



## EQUESTRIAN TRAILS

**Diamond Valley Reservoir Recreation Area**
*not currently available/future plans

**Lake Perris Recreation Area**
17801 Lake Perris Drive
Perris, CA 92571
Ph: (951) 657-0676
www.parks.ca.gov/default.asp?page_is+651

## AGRICULTURAL RESOURCES

**Milk Producer's Council**
Bill Van Dam Ph: (909) 628-6018

**Riverside County Farm Bureau**
Contact: Steve Pastor Ph: (951) 684-6732
www.riversidecfb.com
pastor@riversidecfb.com

**Western Riverside County Agriculture Coalition**
Contact: Bruce Scott at (951) 654-5096 or
wrcac_mail@yahoo.com

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## Educational Programs and Workshops:

**Santa Ana Watershed Association (SAWA)**
Provides on-site education, clean up days, and other educational activities, For more information contact: Renee Latu Ph: (909) 799-7407, Ext. 105

**The San Jacinto Center for Environmental Education**
Provides environmental education at the San Jacinto Wildlife area, Contact: Sue Nash Ph: (909) 228-6710

**San Jacinto Basin Resource Conservation District**
(951) 654-7733

**Western Municipal Water District**
Landscapes Southern California Style-A one-acre water conservation demonstration garden, via a self-guided tour of over 250+ plant species and 50 educational stations. Additional information at www.wmwd.com, School educational tours available. Ph: (951) 789-5987

## Home and Garden



**Green Building:**

National Association of Home Builders www.nahb.org

Home Builders Association www.hba.org

Urban Land Institute www.uli.org/

Ecohome Network, Ph: (323) 662-5207, www.ecohome.org

**Garden-Native Plants and Invasive Species:**

Backyard Composting Program, Ph: (951) 486-3200, for times and locations

California Native Plant Society, www.cnps.org

California Invasive Plant Council, Ph: (510) 525-1502, www.caleppc.org

Riverside County Agricultural Commissioner, Ph: (951) 955-3000

Metropolitan Water District, Heritage Garden Program, www.bewaterwise.com

National Wildlife Federation, Backyard Wildlife Habitat Program Ph: (619) 296-8353, www.nwf.org

Rancho Santa Ana Botanic Garden, Ph: (909) 625-8767 www.rsabg.org

Theodore Payne Foundation Nursery, Ph: (818) 768-1802 www.theodorepayne.org

Tree of Life Nursery, San Juan Capistrano, Ph: (949) 728-0685 www.treeoflifenursery.com

**Fire Departments**
FOR ALL FIRE EMERGENCIES CALL 911!

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# Air, Water and Land Resource Agencies and Organizations

## GOVERNMENTAL AGENCIES:

**South Coast Air Quality Management District** (SCAQMD), Regional air quality or to lodge a pollution complaint, Ph: (800) CUT SMOG (288-7664). SCAQMD, list of non-toxic cleaners in our area, [www.aqmd.gov]

**California EPA, Air Resources Board,** Ph: (800) 363-7664 for pollution complaints and to find out about the health effects of indoor and outdoor air pollution, Ph: (916) 322-2990 for info on air quality programs.

**US Environmental Protection Agency**, Region 9 Office, Potential sources of indoor air pollution and ways to improve indoor air quality, Ph: (415) 972-3102, (800) 438-4318.

## Non-profit Organizations:

**Communities for a Better Environment,** strategies for improving and protecting air quality, www.cbemw.org.

**Environmental Defense Scorecard**, air quality and polluters in your community, [www.scorecard.org].

**Natural Resources Defense Council**, air and energy programs, federal legislation, and publications on air quality, www.nrdc.org.



## Websites with Energy Saving Tips:

Flex Your Power, www.flexyourpower.ca.gov
Earth911, www.earth911.org
US Department of Energy, www.eere.energy.gov

## Local Electricity and Gas Providers:

Southern California Electric, Ph: (800) 655-4555
Southern California Gas Company, Ph: (800) 427-2000

## Air, Water and Land Resource Agencies and Organizations

**Renewable Energy Information:**

Go Green Power, www.gogreenpower.org
Global Green USA, www.globalgreen.org
GreenE, www.green-e.org
California Energy Commission, www.energy.ca.gov
US Department of Energy, www.eere.energy.gov

## Waste, Stormwater and Watershed Management

**Lake Elsinore and San Jacinto Watersheds Authority**
www.mywatersheds.com

**Riverside County Environmental Health Dept.** Call 1 (800) 304-2226 for dates and times of free collection events throughout Riverside County, This Department can help you with hazardous waste disposal and pollution issues.

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**Santa Ana Watershed Project Authority**, www.sawpa.org/

**Riverside County Flood Control and Water Conservation District**
(951) 955-1200, http://www.floodcontrol.co.riverside.ca.us. This Department can help you with flooding concerns and reporting of storm water pollution.

**Riverside County Waste Management Department**
Ph: (800) 366-SAVE or (951) 486-3200, http://www.rivcowm.org. This Department can assist you with information about landfills, recycling, and the composting programs.

**Riverside County Water Task Force,** Supervisor Marion Ashley
Ph: (951) 955-1050, www.district5@rcb05.org

**California Regional Water Quality Control Board, Santa Ana Region**
Ph: (951) 782-4130, region8info@waterboards.ca.gov

**The San Jacinto River Watershed Council**
Ph: (951) 808-8531, www.sawpa.org/sjrwc

**Bureau of Reclamation**
Reclamation is the largest wholesale water supplier in the United States, and the nation's second largest producer of hydroelectric power. Its facilities also provide substantial flood control, recreation, and fish and wildlife benefits. Visit their website at http://www.usbr.gov
Southern California area office, Ph: (951) 695-5310



## Government Representatives

### UNITED STATES LEGISLATURE:

To find out who your representative and senators are, either call your local city hall, check your telephone book or enter your zip code in the following website: www.congress.org, Federal and State Elected Officials, Cities in Watershed

### STATE OF CALIFORNIA

#### Governor

**Arnold Schwarzenegger**
Ph: (916) 445-2841 or (213) 897-0322, e-mail: governor@governor.ca.gov

#### Congressional

Congresswoman Mary Bono, U. S. Congressional District 45
Ph: (202) 225-5330 or (951) 658-2312

Congressman Ken Calvert, U.S. Congressional District 44
Ph: (202) 225-1986 or (951) 784-4300

Congressman Darrell Issa, U. S. Congressional District 49
Ph: (202) 225-3906 or (951) 693-2447

Congressman Jerry Lewis, U.S. Congressional District 41
Ph: (202) 225-5861 or (909) 862-6030

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### State Assembly

Bill Emmerson, District 63, Ph: (909) 466-9096

John Benoit, District 64, Ph: (951) 369-6644

Russ Bogh, District 65, Ph: (909) 790-4196

Ray Haynes, District 66, Ph: (951) 699-1113

### State Senate

Bob Dutton, District 31, Ph: (909) 466-4180

Dennis Hollingsworth, District 36, Ph: (951) 676-1020

Jim Battin, District 37, Ph: (951) 953-9502

## SAN JACINTO WATERSHED CITIES AND COMMUNITIES

### Cities

City of Beaumont
Ph: (951) 769-8520
www.ci.beaumont.ca.us

City of Canyon Lake
Ph: (951) 244-2955
www.cityofcanyonlake.com

City of Hemet
Ph: (951) 765-2300
www.cityofhemet.org

City of Lake Elsinore
Ph: (951) 674-3124
www.lake-elsinore.org

City of Moreno Valley
Ph: (951) 413-3000
www.ci.moreno-valley.ca.us

City of Murrieta
Ph: (951) 304-2489
www.murrieta.org

City of Perris
Ph: (951) 943-6100
www.cityofperris.org

City of Riverside
Ph: (951) 826-5311
www.riversideca.gov

City of San Jacinto
Ph: (951) 654-7337
www.ci.san-jacinto.ca.us

### Community

Idyllwild
Ph: (951) 659-3259
www.idyllwildchamber.com

Quail Valley
Ph: (951) 672-1991 (Menifee Chamber)

Sun City
Ph: (951) 672-9006

Menifee
Ph: (951) 672-1991
www.menifeevalleychamber.com

Romoland
Ph: (951) 672-1991 (Menifee Chamber)

Soboba Band of Luiseño Indians
(951) 654-2765

Winchester
Ph: (951) 926-8972

**CONTACT**

**WATER SUPPLIERS**

- Eastern Municipal Water District, www.emwd.org
- Elsinore Valley Municipal Water District, www.evmwd.com
- Idyllwild Water District www.idyllwildwater.org
- Lake Hemet Municipal Water District, www.lhmwd.org
- Nuevo Water Company Ph: (951) 928-1832
- Western Municipal Water District, www.wmwd.com

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# Special Thanks

## DESIGN AND PHOTOGRAPHY



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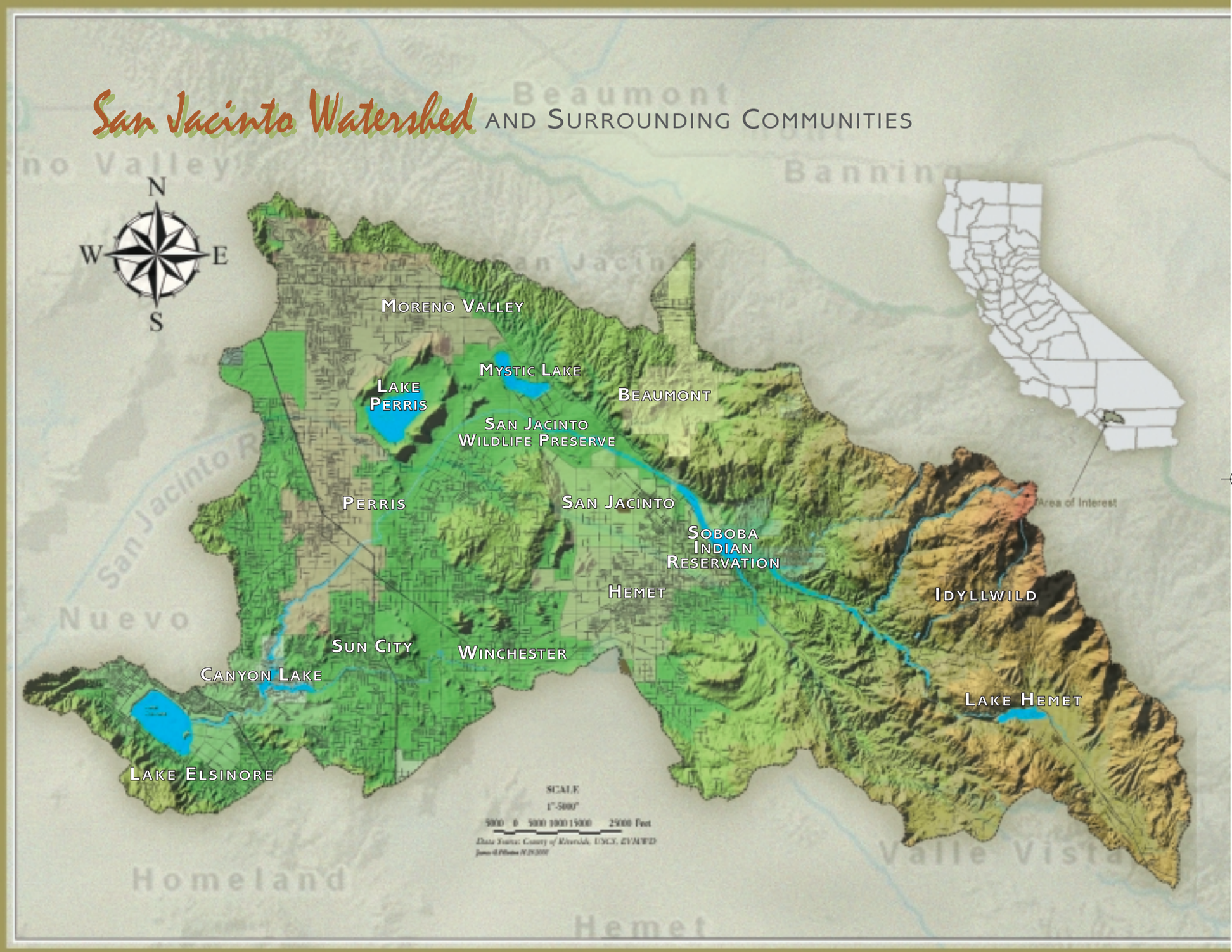
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EMWD, WMWD, EVMWD, LESJWA, Perris State Recreation Area, Riverside County Flood Control & Water Conservation District, Soboba Band of Luiseño Indians, US Forest Service, Idyllwild Water District, and the City of Moreno Valley.

**Watershed Map**
Elsinore Valley Municipal Water District

**Watershed Illustration**
LESJWA

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# San Jacinto Watershed and Surrounding Communities



# Stormwater Pollution Found in Your Area!

**This is not a citation.**

This is to inform you that our staff found the following pollutants in the storm sewer system in your area. This storm sewer system leads directly to

_____ .

- ❑ Motor oil
- ❑ Oil filters
- ❑ Antifreeze/ transmission fluid
- ❑ Paint
- ❑ Solvent/degreaser
- ❑ Cooking grease
- ❑ Detergent
- ❑ Home improvement waste (concrete, mortar)
- ❑ Pet waste
- ❑ Yard waste (leaves, grass, mulch)
- ❑ Excessive dirt and gravel
- ❑ Trash
- ❑ Construction debris
- ❑ Pesticides and fertilizers
- ❑ Other

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**For more information or to report an illegal discharge of pollutants, please call:**

**Riverside County Residents, Call . . .**
**1-800-506-2555**

WHEN IT RAINS
IT DRAINS

EPA
United States
Environmental Protection
Agency

*www.epa.gov/npdes/stormwater*

EPA 833-F-03-002
April 2003

Stormwater runoff is precipitation from rain or snowmelt that flows over the ground. As it flows, it can pick up debris, chemicals, dirt, and other pollutants and deposit them into a storm sewer system or waterbody.

Anything that enters a storm sewer system is discharged untreated into the waterbodies we use for swimming, fishing, and providing drinking water.

## Remember: Only Rain Down the Drain

To keep the stormwater leaving your home or workplace clean, follow these simple guidelines:




- Use pesticides and fertilizers sparingly
- Repair auto leaks.
- Dispose of household hazardous waste, used auto fluids (antifreeze, oil, etc.), and batteries at designated collection or recycling locations.
- Clean up after your pet.
- Use a commercial car wash or wash your car on a lawn or other unpaved surface.
- Sweep up yard debris rather than hosing down areas. Compost or recycle yard waste when possible.
- Clean paint brushes in a sink, not outdoors. Properly dispose of excess paints through a household hazardous waste collection program.
- Sweep up and properly dispose of construction debris like concrete and mortar.

