Print Form

Notice of Exemption

Appendix E

To: Office of Planning and Research
P.O. Box 3044, Room 113
Sacramento, CA 95812-3044

County Clerk
County of: Siskiyou
311 Fourth Street, Room 201
Yreka CA 96097

From: (Public Agency): Environmental Health Division
806 South Main Street
Yreka CA 96097

(Address)

FILED
Siskiyou County
DEC 12 2025
LAURA BYNUM, CLERK
BY: ENDORSED-D. BROOKS
Deputy Clerk

Project Title: Water Well Permit #25040

Project Applicant: Perry Colburn

Project Location - Specific:

Near Old Westside Road, Grenada, CA (APN: 022-221-070)

Project Location - City: Grenada Project Location - County: Siskiyou

Description of Nature, Purpose and Beneficiaries of Project:
Approval of a production well.

Name of Public Agency Approving Project: Siskiyou County Community Development

Name of Person or Agency Carrying Out Project: Environmental Health Division

Exempt Status: **(check one):**

- ☐ Ministerial (Sec. 21080(b)(1); 15268);
- ☐ Declared Emergency (Sec. 21080(b)(3); 15269(a));
- ☐ Emergency Project (Sec. 21080(b)(4); 15269(b)(c));
- ☒ Categorical Exemption. State type and section number: 15303 and 15061(b)(3)
- ☐ Statutory Exemptions. State code number:

Reasons why project is exempt:
See attachment.

Lead Agency Contact Person: Hailey Lang Area Code/Telephone/Extension: 530-841-2100

If filed by applicant:

1. Attach certified document of exemption finding.
2. Has a Notice of Exemption been filed by the public agency approving the project? ☒ Yes ☐ No

Signature: Hailey Lang Date: 12/11/2025 Title: Director

☒ Signed by Lead Agency ☐ Signed by Applicant

Authority cited: Sections 21083 and 21110, Public Resources Code.
Reference: Sections 21108, 21152, and 21152.1, Public Resources Code.

Date Received for filing at OPR:

Revised 2011

Reason why project is exempt:

Larry Walker and Associates performed a hydrogeological analysis utilizing their hydrologic modeling tool from which Natural Resources and Community Development has concluded the separation distance and well pumping drawdown indicates that the production well will not have a significant adverse impact on public trust resources. County staff has determined that the well does not pose any threat to human health, safety, or the environment. Per the Siskiyou County Flood Control District, this well is consistent with historic activity occurring on the parcel and is also consistent with the Groundwater Sustainability Plan for Shasta Valley. See memorandum for additional details.


230 ft Angle: 270.72°
Well
231 ft Angle: 242.68
Septic Tank
Microsoft, Vantor

September 25, 2025

MEMORANDUM

MEMO TO: RICK DEAN, DIRECTOR, COMMUNITY DEVELOPMENT DEPARTMENT, SISKIYOU COUNTY

FROM: MATT PARKER, NATURAL RESOURCES SPECIALIST, NATURAL RESOURCES DEPARTMENT

RE: PUBLIC TRUST CONSIDERATION: PERRY COLUBURN PRODUCTION WELL PERMIT APPLICATION, APN: 022-221-070

Whereas the counties, as subdivisions of the State of California have a fiduciary duty to consider the public trust before authorizing the drilling of groundwater well whose extractions might have an adverse impact on public trust resources.

The Siskiyou County Natural Resources Department (Department) has reviewed the above entitled well permit application for a production well to serve the purpose of irrigating 28 acres of farmland in the Shasta Valley. The Department has reviewed 1) the information in the application, and 2) the technical memorandum (Attachment #1) prepared by Larry Walker Associates to aid in its evaluation of Public Trust Doctrine consideration.

The Department finds:

- The well location is approximately 3.77 miles from the nearest navigable waterway (Shasta River).

- The professional technical memorandum prepared by Larry Walker Associates, which models impacts from the proposed well, along with the other materials reviewed, do not indicate that extraction of water from the proposed well would substantially impair or interfere with public trust uses or values within interconnected downstream navigable waters, including the Shasta River.

- More specifically, under the conditions specified below, the limited pumping from this existing Agricultural Use (28 acres) in the Shasta Valley watershed in the same historic farmed acreage will not substantially impair or interfere with public trust uses or values within interconnected downstream navigable waters, including the Shasta River.

- To the extent the use of groundwater from this site may ultimately contribute to cumulative reductions in surface waters in downstream navigable waters, the production of groundwater for irrigation use on this parcel in the Shasta Valley is within the public interest because this parcel holds groundwater rights intended to be put to beneficial use consistent with Article X, section 2 of the California Constitution.

- The issuance of this permit for a production well purpose qualifies as a Class 3 categorical exemption under Section 15303 of the CEQA Guidelines which allows for construction and installation of small new equipment facilities. In addition, the project has been found to be consistent with Siskiyou County Codes and Policies.

Production Well water use (well permit conditions):

- Water production is not to exceed irrigation of the 28 acres of farmland historically farmed on APN #022-221-070
- The subject well shall be in compliance with current and any future directives put forth by the Shasta Valley Groundwater sustainability Agency (GSA) to maintain groundwater sustainability, including monitoring and addressing impacts to Public Trust Resources. In the Shasta Valley the project and management actions may include but are not limited to reporting of pumping volume, strategic groundwater pumping restrictions, voluntary well metering

Attachment:

- Attachment #1 - LWA Technical Memorandum

Attachment #1

September 21, 2025

Larry Walker Associates
Technical Memorandum

Preliminary evaluation of proposed well PC
APN 022-221-070, Shasta Valley, CA

This technical memorandum (TM) describes a preliminary modeling analysis of the effects of pumping proposed well PC in Shasta Valley, California (Figure 1) on Shasta River streamflow.

The Shasta Watershed Groundwater Model (SWGM), documented in the GSP[1], was used to simulate pumping from the proposed well. SWGM represents the best currently available scientific tool for this purpose. The model is presently being updated through the GSP process, and the current version of the model was used for the analysis presented in this memorandum.

Thus, SWGM was applied to evaluate impacts of the proposed pumping on streamflow in the Shasta River. Location, depth, pumping rate, and period of pumping, along with use information, for the proposed well were provided by the applicant and are listed in Table 1.

SWGM grid cell location for the pumping was determined from the well location provided by the applicant, and model layer for the pumping from PC was determined from the land surface elevation at the proposed well site and the expected completion depth of the well.

Streamflow impacts were evaluated by comparing model results with well PC pumping to results of the baseline scenario. The estimated pumping rate of PC is 100 gallons per minute (gpm), and the well is planned to operate from April through September (Table 1), which is 182 days. However, Table 1 also reports the estimated annual extraction volume to irrigate the pasture is 30 acre-feet, which suggests that pumping would not occur continuously at 100 gpm during the 6 months of use. Thus, an average pumping rate of 37.3 gpm for the period, which totals 30 acre-ft for the season, was simulated to evaluate the streamflow impacts.

[1] Siskiyou County Flood Control and Water District Groundwater Sustainability Agency, Shasta Valley Groundwater Sustainability Plan, January 2022, https://www.co.siskiyou.ca.us/naturalresources/page/shasta-valley

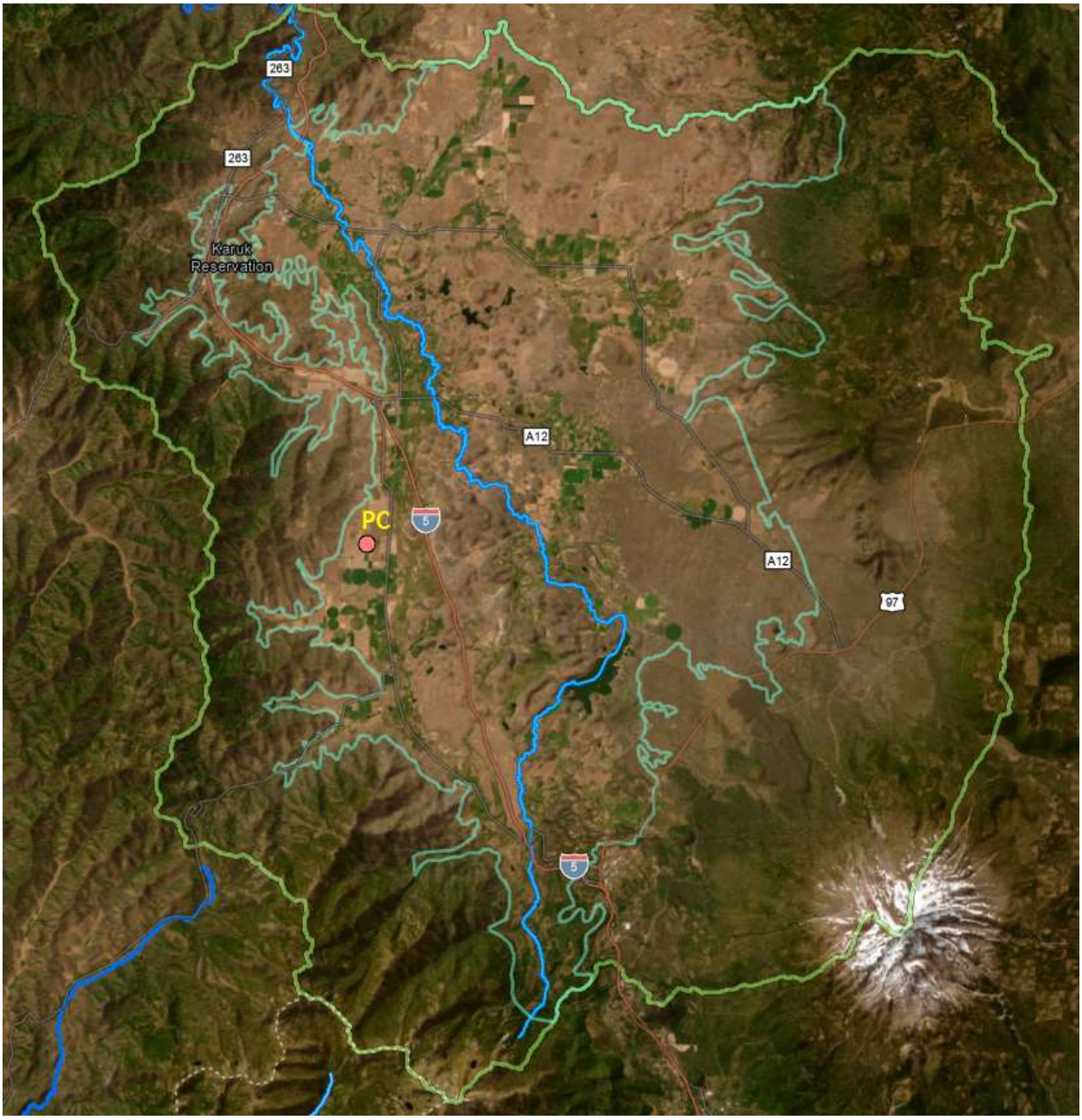


Figure 1. Map showing Shasta Valley watershed and groundwater basin, Shasta River, and location of proposed well PC.

Table 1. Proposed well information.

Well Code	Lat	Long	Estimated Pumping Rate (gpm)	Estimated Depth (ft)	Estimated Time Frame of Use	Estimated Acreage of Use	Estimated Annual Extraction Vol (acre-ft)	Crop Type	Irrigation Method
PC	41.579	122.539	100	180	April - September	28	30	Ornamental conifers; trees	Drip; overhead sprinklers

PC model coordinates (NAD_1983_California_Teale_Albers)

x: -211983.9 m

y: 398599.4 m

SWGM model row: 106

SWGM model column: 65

SWGM model layer: 2

Evaluation of Proposed Well PC

Figure 2 shows the location of the proposed pumping well PC, south of Grenada. A tributary to the Shasta River is shown to the east, which joins the Shasta River near Grenada. Blue shaded cells represent the Shasta River and its tributaries, and red shaded cells represent virtual agricultural pumping wells[2] in SWGM. The closest reach on the tributary (Willow Creek) to the Shasta River to well PC is approximately 3,000 m (about 2 miles) to the east.

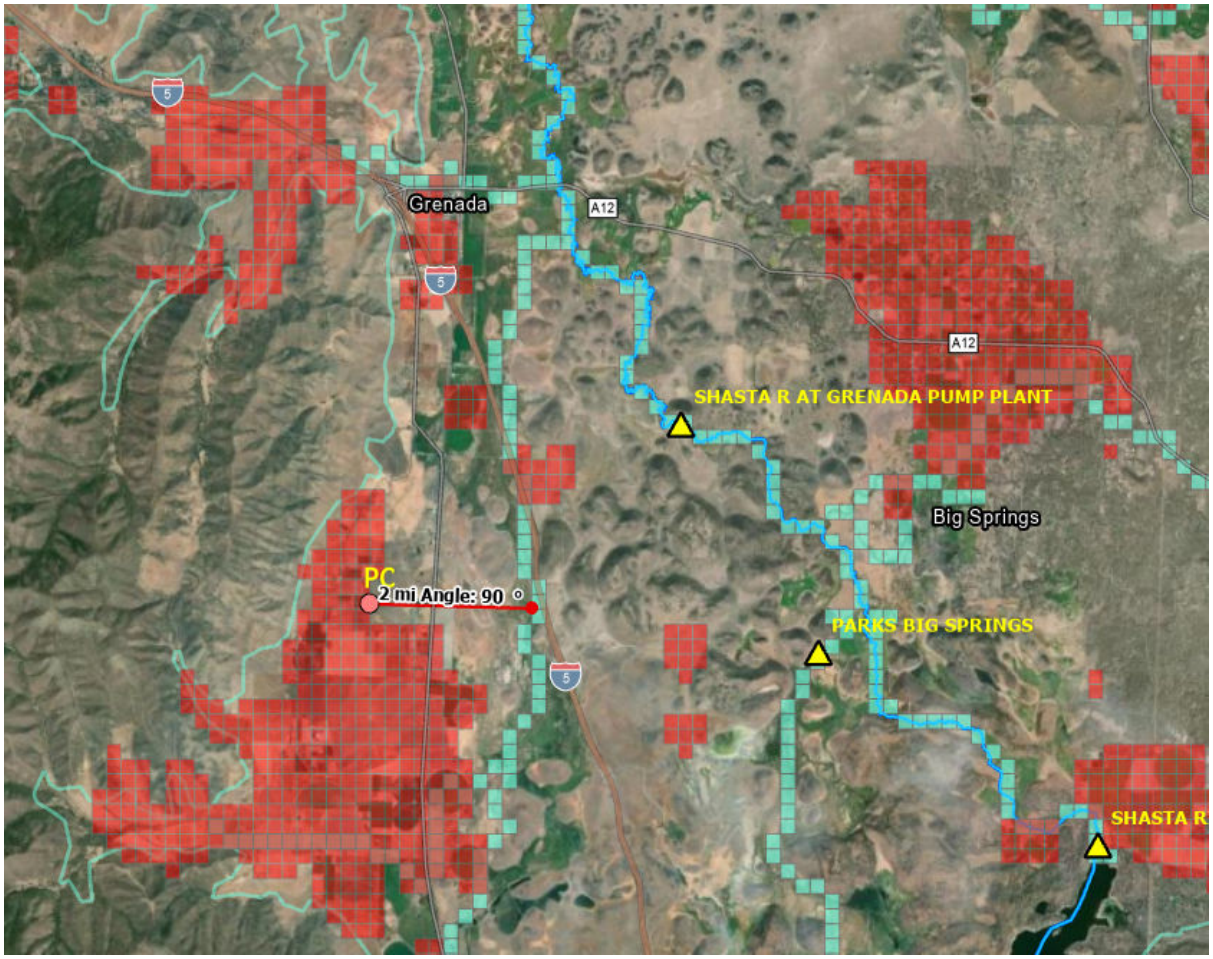


Figure 2. Map showing location of proposed well PC, Shasta River and its tributaries, and agricultural pumping locations in SWGM.

[2] Actual agricultural irrigation well locations were not determined in the current model configuration; thus, virtual wells were used to distribute the irrigation pumping estimated by University of California, Davis and Larry Walker Associates.

Figure 3 shows an east-west cross-section along the SWGM in the vicinity of well PC. Model grid cells are uniform in map view with an area of 270 m^2, but are variable in thickness. In the vicinity of well PC, model layer 1, the uppermost layer, is about 13 m or 43 ft in thickness; model layer 2 is 50 m or about 164 ft in thickness; model layer 3 is 100 m or 328 ft thick, and model layer 4 is 350 m or 1,148 ft thick. In this view, the model representation of the Shasta River and its tributaries is indicated with a green shaded cell in layer 1. The location of agricultural wells in the current model is depicted with red shaded cells. Cyan shaded cells in layer 1 indicate locations of irrigation ditches. The location of well PC is shown by the blue circular symbol with an "X" inside. The screen interval of PC is determined to be located within SWGM model layer 2, which corresponds with the expected depth of well PC.

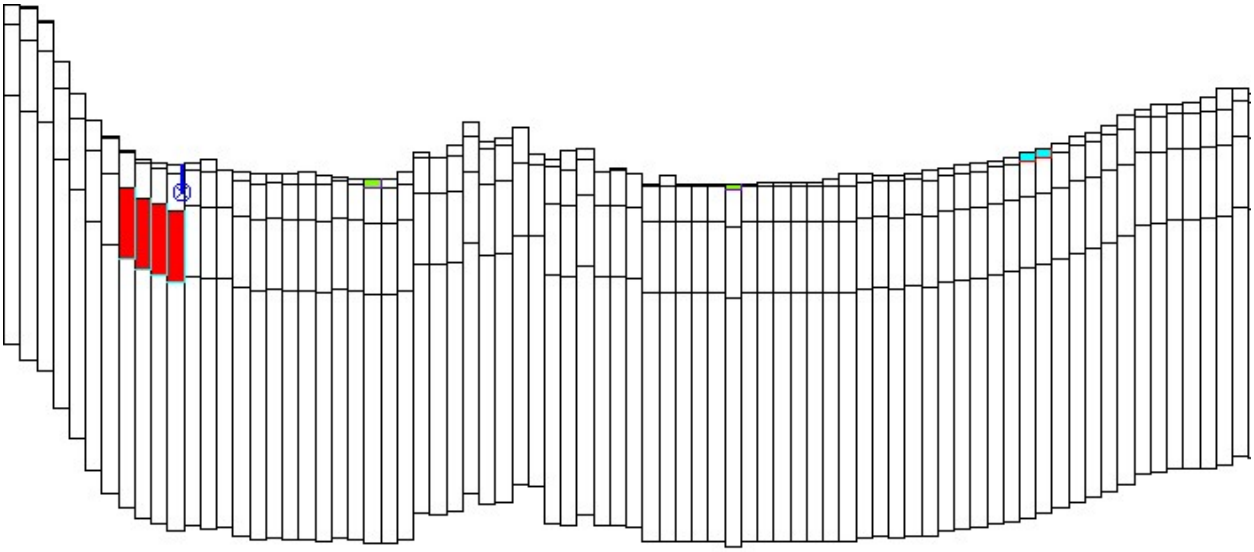


Figure 3. Cross-section of model grid in vicinity of well PC. Model rows are oriented along east-west cardinal directions on a compass: east is to the right and west is to the left.

Figure 4 shows contours of the difference in the computed water table elevation with well PC pumping compared to the baseline model. Maximum drawdown at the water table is about 0.7 m, and maximum drawdown along the Shasta River tributary to the south is approximately 0.06 m or about 6 cm.

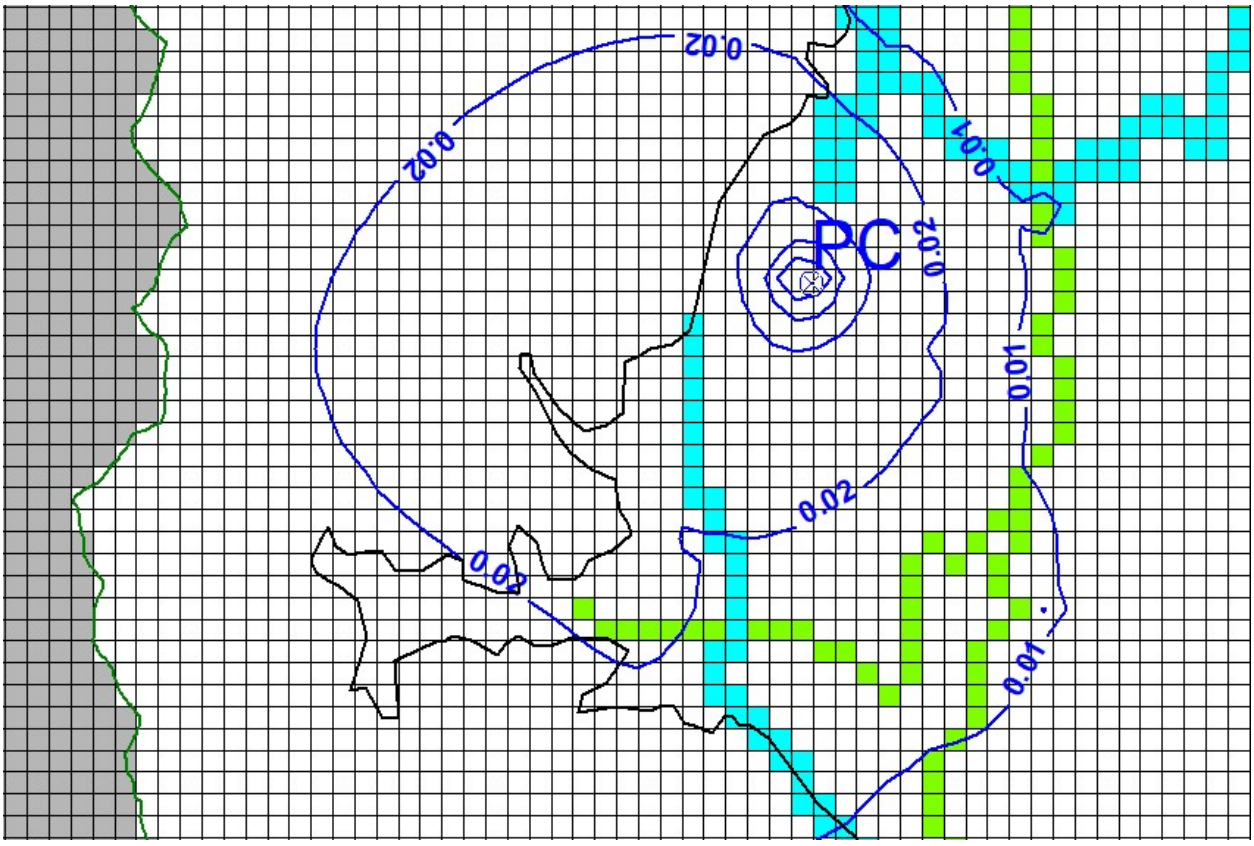


Figure 4. Contours of water table difference, in meters, due to pumping Well PC. Variable contour interval is shown. Green shaded cells represent Shasta River tributaries; cyan shaded cells represent irrigation ditches; gray shaded cells represent land outside the groundwater basin boundary. The black line designates the groundwater basin boundary, and the green line denotes the watershed boundary.

Streamflow depletion along the Shasta River and its tributaries due to pumping from well PC varies through time. Initially, the water pumped by the well comes from groundwater storage corresponding with groundwater level declines but, with time, an increasing amount of the pumped water is derived from reduced discharge to the streams and induced infiltration from the streams. Table 1 indicates that pumping from well PC occurs during the irrigation season from April through September; effects of the additional pumping continue for a time after pumping stops, then the system transitions back to its previous state as the irrigation season ends and the wet season begins, then the cycle repeats.

Based on comparison of model computed streamflow over 33 years in the baseline vs. well PC pumping scenario at the Shasta River near Montague gage (SRM), annual streamflow depletion increases to nearly 77 percent of the annual pumping of well PC, which is 30 acre-ft (Table 1). It requires about 10 years to reach this maximum of approximately 23 acre-ft per year of the well discharge being supplied by streamflow depletion. Maximum streamflow depletion represents approximately 0.01 percent of modeled average annual streamflow at the SRM gage.

Limitations

SWGM is presently being updated and recalibrated. Currently, some areas of the model are better calibrated than others. Thus, computed groundwater levels and flows, and stream flows, may change as improvements are included in the model. However, the evaluation described herein is based on changes in heads and streamflow from the baseline model, which should help minimize issues with the current status of calibration. An additional limitation of this analysis is that, currently, pumping from individual wells is evaluated separately; however, the effects of permitting multiple new wells are additive. Thus, a model simulation that includes all the permitted wells would be needed to evaluate the combined effects on streamflow depletion. Further, this simple approach for evaluating the proposed wells assumes that the recharge, due to climatic variations over the past 33 years, will follow the same pattern with the same rates in the future. It also assumes that, except for the addition of PC, future pumping will occur at the same locations and rates as the historical modeled values.

Future hydrology (wet or dry years), if different than the period simulated, could result in more or less computed streamflow depletion due to differences in accompanying aquifer recharge rates. A future simulation with projected hydrology could address this limitation on estimating long-term impacts from the proposed pumping.

Conclusions

The SWGM was used to compute groundwater level and streamflow impacts, due to pumping proposed well PC, on the Shasta River. Results based on the current model suggest that pumping at the proposed location, depth, pumping rate and duration, would have minimal impact on streamflow in the Shasta River.

