

Chapter 5

Comparison of Alternatives

5.1 Introduction

This chapter presents a comparison of alternatives to the Proposed Project. Various alternatives were considered during the preparation of this Draft EIS/EIR. As described in detail in sections 1.6.7 and 2.9.1 of this Draft EIS/EIR, NEPA and CEQA require that an EIS and EIR present a reasonable range of alternatives to the Proposed Project that would feasibly attain most of the project's objectives and avoid or substantially lessen any of its significant impacts (40 CFR 1502.14(b); CEQA Guidelines Section 15126.6).

Alternatives in this Draft EIS/EIR have been analyzed at a level of detail that provides sufficient information about the environmental effects of each alternative for comparison purposes and to allow for informed decision-making. This comparison of alternatives identifies the resource areas in which the environmental resource analyses in Chapter 3 of this Draft EIS/EIR identify that either a potentially significant impact could occur unless mitigation is incorporated or that significant and unavoidable impacts would occur.

5.2 Alternatives Comparison

5.2.1 Project Alternatives

In addition to the Proposed Project, this Draft EIS/EIR considers two alternatives, the No Project Alternative required by CEQA and the No Federal Action Alternative required by NEPA. These two alternatives are summarized below and in Table 6-1. The Proposed Project and the two alternatives have been analyzed co-equally in this Draft EIS/EIR to provide sufficient information and meaningful detail about the environmental effects of each alternative so that informed decision-making can occur.

5.2.1.1 Proposed Project

The Proposed Project, described fully in Section 2.6 Proposed Project, consists of the construction and operation of improvements at the existing Berths 12-131 Terminal. Construction would include replacing the existing wharf at Berths 126-129, deepening Berths 126-129 to accommodate larger containerships, installing 10 new wharf cranes, and expanding the terminal's existing intermodal railyard and installing electrically powered, rail-mounted cranes to load and unload trains. Operation would resemble existing activities except that the wharf cranes could handle the largest containerships and the terminal could handle more cargo than the existing terminal (Table 6-1).

1 **Table 5-1: Summary of Proposed Project and Alternatives at Full Operation (2062)**

| | Proposed Project | Alt. 1: No Project | Alt. 2: No Federal Action |
|----------------------------------|-------------------------|-------------------------------|--|
| Annual TEUs | 1,871,405 | 1,332,000 | 1,332,000 |
| Annual Ship Calls | 156 | 208 | 208 |
| 24-hour Peak Day Ship Calls | 3 | 3 | 3 |
| Truck trips (one-way) | 1,668,000 | 1,302,000 | 1,182,000 |
| Train trips (one-way) | 1,059 | 507 | 768 |
| Operating Cranes | 15 | 5 | 5 |
| Total Dredging (cy) | 310,000 | 0 | 0 |
| Maximum Vessel Size (TEU) | | | |
| Berths 121–126 | 6,500 | 6,500 | 6,500 |
| Berths 126–129 | 14,000+ | 8,000 | 8,000 |

2

3 **5.2.1.2 Alternative 1 - No Project**

4 As described fully in Section 2.9.1 Alternatives Evaluated in This Draft EIS/EIR, the No
5 Project Alternative would not improve the Berths 121-131 Terminal. No construction
6 would occur. The terminal would continue to handle small and medium-sized
7 containerships, and trains would continue to be loaded and unloaded by the terminal's
8 mobile cargo-handling equipment, which would be diesel-powered at least until 2035.
9 The terminal's throughput would increase with increased economic demand (Table 6-1),
10 but would be limited by the constraints of the berth and the wharf cranes. Alternative 2
11 would have the same maximum cargo handling capacity as the No Project Alternative
12 because, like that alternative, the wharf and berth would not be improved. However, more
13 of its cargo would be moved by train instead of truck because of the expanded railyard.

14 **5.2.1.3 Alternative 2 – No Federal Action**

15 The No Federal Action Alternative required by NEPA (Table 6-1), described more fully
16 in Section 2.9.1 Alternatives Evaluated in This Draft EIS/EIR, includes only the
17 construction and operational activities which would reasonably be expected to occur
18 without a USACE permit. These are assumed to include the expansion of the terminal's
19 intermodal railyard, with the addition of the rail-mounted cranes, and the operation of the
20 improved terminal.

21 **5.2.2 Alternatives Comparison**

22 Implementation of the Proposed Project and both of the alternatives would result in no
23 impacts or less-than-significant impacts under both NEPA and CEQA related to:

- 24 • **Aesthetics and Visual Resources:** scenic vistas, scenic resources, visual quality,
25 light and glare (CEQA only), and overall visual character (NEPA only).
- 26 • **Air Quality:** odors, consistency with the AQMP.
- 27 • **Biological Resources:** wetlands, wildlife movements and migration, local
28 conservation policies, Habitat/Natural Community Conservation Plans, and loss
29 of marine habitat.

- 1 • **Cultural Resources/Tribal Cultural Resources:** historic resources,
2 archaeological resources, human remains, tribal cultural resources, and
3 paleontological resources.
- 4 • **Energy:** energy consumption and consistency with state or local energy
5 efficiency plans.
- 6 • **Hazards and Hazardous Materials:** transport, use, and disposal of hazardous
7 materials, releases through upset or accident, proximity to schools, location on
8 Cortese List site, and emergency response plans.
- 9 • **Land Use:** dividing a community and consistency with applicable land use plans,
10 policies, and regulations.
- 11 • **Noise:** generation of excessive noise, generation of excessive vibration, and
12 relationship to airport.
- 13 • **Ground Transportation:** conflict with policies, VMT, design hazards, and
14 emergency access.
- 15 • **Public Services:** fire protection or police resources.
- 16 • **Utilities:** relocation of utilities and infrastructure, water supply, wastewater
17 treatment, solid waste facilities and policies.
- 18 • **Water Quality, Hydrology, and Sediments:** violation of water quality
19 standards, drainage and flooding, release of contaminants, and consistency with
20 the Basin Plan.
- 21 • **Marine Transportation:** operation of vessel traffic in navigational areas.

22 The Proposed Project and both alternatives would have significant impacts related to air
23 quality, biological resources, and greenhouse gases. The Proposed Project's biological
24 impacts, related to construction, could be mitigated to less than significant but those of
25 the two alternatives, related to operation, could not be mitigated.

26 As the alternatives to the Proposed Project are intended to avoid or substantially lessen
27 one or more of the significant adverse effects of the Project, this chapter focuses on the
28 comparative merits of the alternatives with respect to those environmental resource areas
29 that would have significant impacts, unless mitigation can be incorporated, or significant
30 and unavoidable impacts.

31 **5.2.2.1 CEQA Comparison**

32 Table 5-2 identifies the resource areas where the Proposed Project or alternative(s) would
33 result in an unavoidable significant impact under CEQA, as analyzed in Chapter 3;
34 impacts are presented in more detail in Table ES-2.

35 As shown in Table 5-2, the Proposed Project would have significant unavoidable impacts
36 in the area of air quality. Alternatives 1 and 2 would have significant unavoidable
37 impacts in the areas of air quality, biological resources, and greenhouse gases.

38

1 **Table 5-2: Summary of CEQA Impacts by Alternative**

| Environmental Resource Area | Proposed Project | Alternative 1 No Project | Alternative 2 No Federal Action |
|-----------------------------|------------------|--------------------------|---------------------------------|
| Air Quality and Meteorology | S (4) | S (2) | S (2) |
| Biological Resources | M (1) | S (1) | S (1) |
| Greenhouse Gas Emissions | M (1) | S (1) | M (1) |

2 Notes:

3 The analysis includes only project-level impacts, not cumulatively considerable contributions to
4 significant cumulative impacts.5 Numbers in parentheses indicate the number of CEQA impacts that would occur in each
6 resource area.

7 Alternatives eliminated from further consideration are not included.

8 S = Unavoidable significant impacts; M = Significant but mitigable impact

9 **5.2.2.2 NEPA Comparison**

10 Table 5-3 presents a summary of the results of the NEPA significance determinations for
11 resource areas and identifies the alternatives that would result in unavoidable significant
12 impacts under NEPA, as discussed in Chapter 3; impacts are presented in more detail in
13 Table ES-2. Table 5-3 also includes the resource areas that would have significant
14 impacts under NEPA that can be mitigated to less-than-significant. Alternative 2,
15 representing the activities that would occur without federal actions/approvals, is the same
16 as the NEPA baseline. As such, no impacts would occur under Alternative 2. NEPA does
17 not require analysis of the CEQA No Project Alternative (Alternative 1). Accordingly,
18 the discussion of impacts below focuses entirely on the impacts of the Proposed Project.

19 For air quality, significant unavoidable impacts of the Proposed Project would be related
20 to emissions during construction and operations and to health risks associated with
21 construction and operations. For biological resources, construction associated with pile
22 driving for the Proposed Project would have significant but mitigable impacts. The
23 Proposed Project would have disproportionately high and adverse effects on minority
24 populations related to air quality impacts. Although not a significant impact under NEPA,
25 greenhouse gas emissions by the Proposed Project and both alternatives would exceed the
26 indicator level established by the CEQ.

27 **Table 5-3: Summary of NEPA Impacts by Alternative**

| Environmental Resource Area | Proposed Project | Alternative 1 No Project | Alternative 2 No Federal Action |
|-----------------------------|------------------|--------------------------|---------------------------------|
| Air Quality and Meteorology | S (4) | N/A | N |
| Biological Resources | M (1) | N/A | N |

28 Notes:

29 The analysis includes only project-level impacts, not cumulatively considerable contributions to
30 significant cumulative impacts.

31 Parentheses indicate the number of NEPA impacts would occur in each resource area.

32 Alternatives eliminated from further consideration are not included.

33 S = Unavoidable significant impacts; M = Significant but mitigable impact; N = No impact; N/A

34 = Not Applicable

35

1 Based on the above, Alternative 2 is deemed to be environmentally preferable under
2 NEPA because it results in no impacts compared to the NEPA baseline. However,
3 because Alternative 2 would not deepen the berth, install modern wharf cranes, or
4 increase the terminal's capacity, it would not address the overall need to improve Port
5 facilities to accommodate larger vessels that are projected to call at the Terminal through
6 2055. Thus, Alternative 2 would not meet the purpose and need for the project under
7 NEPA.