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TO: Commissioners and Alternates

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SUBJECT: **Memorandum regarding Beneficial Reuse Considerations (Appendix 2 to Bay Plan Amendment No. 1-26 Staff Report and Preliminary Recommendation)**
(For Commission consideration on October 15, 2026)

Memorandum regarding Beneficial Reuse Considerations

I. Introduction

Proposed *Sediment Management* Policy 7 provides that, "<u>Dredged sediment shall be beneficially reused, and shall not be dumped at an aquatic disposal site, if beneficial reuse is reasonably capable of being done after taking into consideration:</u>

<u>(1) whether the sediment is suitable for beneficial reuse;</u>

<u>(2) whether there is an available beneficial reuse site;</u>

<u>(3) the cost to transport and offload the dredged sediment at a beneficial reuse site in comparison to the cost to dispose of the dredged sediment at an aquatic disposal site;</u>

<u>(4) the proposed dredging equipment (clamshell, excavator, or hydraulic) and offloading or disposal equipment;</u>

<u>(5) the cost of the dredging project and any associated capital improvements;</u>

<u>(6) the economic benefit and any other benefits of the dredging project and any associated capital improvements; and</u>

<u>(7) any agreements between or among co-applicants for the dredging project and any associated capital improvements.</u>"

These considerations to be evaluated in determining whether beneficial reuse is reasonably capable of being done were developed based on review of the factors applied under the analogous but distinct inquires under Section 404 of the Clean Water Act ("Section 404") to determine whether there is a "practicable alternative" to the discharge of dredged or fill material into waters of the United States and under the California Environmental Quality Act ("CEQA") to determine whether there is a "feasible alternative" to a proposed project.

Certain factors that may be considered when analyzing alternatives under Section 404 or CEQA were found to be relevant when evaluating the appropriate disposition of dredged sediment, while other factors were not. Those Section 404 and CEQA factors that are relevant to an analysis of whether beneficial reuse is reasonably capable of being done have been adapted for use in the proposed policy. In contrast to the broadly worded factors considered under Section 404 or CEQA, the considerations within the proposed policy contain greater detail and specified criteria to reflect the unique nature of an alternatives analysis for determining the appropriate disposition of dredged sediment.

Under Section 404, with limited exceptions, "no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem." 40 C.F.R. § 230.10(a). The regulations adopted by the U.S. Environmental Protection Agency ("EPA"), known as the 404(b)(1) Guidelines ("Guidelines"), provide that an alternative is practicable "if it is available and capable of being done after taking into consideration *cost, existing technology, and logistics in light of overall project purposes*." 40 C.F.R. § 230.10(a)(2) (emphasis added).

Under CEQA, an environmental impact report must describe a range of reasonable alternatives to a project, or to the location of a project, that would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project. Pub. Res. Code § 21002; 14 C.C.R. § 15126.6(a). For purposes of evaluating alternatives, "feasible" means "capable of being accomplished in a successful manner within a reasonable period of time, taking into account *economic, environmental, legal, social, and technological factors*." Pub. Res. Code § 21061.1; 14 C.C.R. § 15364 (emphasis added).

II. Cost or Economic Considerations

The Guidelines provide for consideration of "cost" and CEQA provides for consideration of "economic" factors in evaluating alternatives. Before discussing the application of these terms, it is important to note that the threshold issue under Section 404 is that an alternative must be able to achieve "the overall project purposes," (40 C.F.R. § 230.10(a)), and the threshold issue under CEQA is that an alternative must be to "attain most of the basic objectives of the project." (14 C.C.R. § 15126.6(a)). In contrast, the basic purpose or objective of a dredging project is to remove sediment from the bottom of the Bay, tributary, channel, or other area to allow for or maintain navigation or the mooring of vessels. The appropriate disposition of the resulting dredged sediment must necessarily be determined, but is not a purpose or objective of the dredging project.

Similarly, a project proponent is required under Section 404 to identify potential alternative sites that would meet the overall project purposes and under CEQA to identify potential alternative onsite project configurations and alternative sites that would achieve most of the basic project objectives. In contrast, when considering alternatives for the disposition of dredged sediment, an applicant is not required to search for potential alternative sites and evaluate whether such sites can meet the objectives of the dredging project or be acquired by the applicant. Rather, there are designated aquatic disposal sites in the Bay or the ocean and there are (or may be) known beneficial reuse sites which are permitted to accept and place dredged sediment from a dredging project. Thus, an alternatives analysis for the disposition of dredged sediment will focus on comparing aquatic disposal and beneficial reuse of dredged sediment between known, designated sites which a project proponent need not have the ability to acquire to implement its dredging project.

Although the context for evaluating alternatives for the disposition of dredged sediment is unique and different from the evaluation of practicable alternatives under Section 404 and feasible alternatives under CEQA, the factors considered in alternatives analyses under the Section 404 and CEQA provide helpful guidance for identifying the relevant considerations under the proposed policy particularly with respect to cost or economic factors.

In the preamble to the Guidelines, EPA explained how the differences between the cost of the proposed project and an alternative are to be considered in determining the practicability of an alternative under Section 404. EPA's intent was "to consider those alternatives which are reasonable *in terms of the overall scope/cost of the proposed project*."[1] EPA used the word "cost" in defining "practicability" rather than the word "economic," which had been used in the proposed rule because "[t]he term economic might be construed to include consideration of the applicant's financial standing, or investment, or market share, a cumbersome inquiry which is not necessarily material to the objectives of the Guidelines."[2]

EPA acknowledged that "[i]f an alleged alternative is unreasonably expensive to the applicant, the alternative is not 'practicable.'"[3] However, "[t]he mere fact that an alternative may cost somewhat more does not necessarily mean it is not practicable."[4] According to

[1] 45 Fed. Reg. 85,336, 85,339 (Dec. 24, 1980) (emphasis added).

[2] *Id.*

[3] *Id*. at 85,343.

[4] *Id.* at 85,339. *See* U.S. Army Corps of Engineers Headquarters, Permit Elevation Decision, Plantation Landing Resort, Inc. (April 21, 1989) at 8 (while an applicant's wish to minimize costs is a factor which may be considered, that factor alone must not be allowed to control or unduly influence the Corps' definition of project purpose or practicable alternative.).

EPA, "it is not a particular applicant's financial standing that is the primary consideration for determining practicability, but rather characteristics of the project and what constitutes a reasonable expense for these projects that are most relevant to practicability determinations."[5]

Thus, while project "viability" is a legitimate component of the concept of practicability, that component is addressed in terms of the logistics, technical feasibility, and costs criteria in the Guidelines, not as a separate or independent factor.[6] Moreover, these determinations generally should be based on consideration of a "typical" applicant for the type of project at issue and not focus too heavily on the specific profitability statements of a particular applicant.[7]

According to EPA, "[t]he determination of what constitutes an unreasonable expense should generally consider whether the projected cost is substantially greater than the costs normally associated with the particular type of project. Generally, as the scope/cost of the project increases, the level of analysis should also increase."[8]

CEQA's definition of "feasible" refers to "economic" factors, rather than "cost," but as under the Guidelines, a CEQA alternatives analysis focuses on the reasonableness of an alternative's additional costs in comparison to costs of the proposed project, and not on whether the project proponent can afford the increased costs.[9] That an alternative may be

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[5] USEPA, Memorandum: Appropriate Level of Analysis Required for Evaluating Compliance with the CWA Section 404(b)(1) Guidelines Alternatives Requirements. *See Butte Environmental Council v. U.S. Army Corps of Engineers*, 2009 U.S. Dist. LEXIS 3839, *14-15, aff'd, 620 F.3d 936 (9th Cir. 2010) (alternative site likely entailed unreasonable development costs where costs exceed the market value of the developed property); *Sierra Club v. Flowers,* 423 F. Supp. 2d 1273, 1354 (S.D. Fla. 2006) (quoting Corps guidance stating that "the determination of what constitutes an unreasonable expense should generally consider whether the projected cost is substantially greater than the costs normally associated with the particular type of project.").

[6] *See Sierra Club v. Flowers*, 423 F. Supp. 2d at 1354 *(citing* U.S. Army Corps of Engineers Headquarters, Review and Findings, Old Cutler Bay 404(q) Elevation Decision (Sept. 13, 1990), at 12). *See also* Old Cutler Bay 404(q) Elevation Decision at 8-9 (an alternative cannot be practicable if it is not economically viable, but if potential alternatives can be operated and/or constructed and result in the applicant incurring no more than reasonable additional costs, the project's economic viability should be preserved through application of the practicability factors in the Guidelines).

[7] Old Cutler Bay 404(q) Elevation Decision at 9.

[8] USEPA, Memorandum: Appropriate Level of Analysis Required for Evaluating Compliance with the CWA Section 404(b)(1) Guidelines Alternatives Requirements; *Sierra Club v. Flowers,* 423 F. Supp. 2d 1273, 1354 (S.D. Fla. 2006) (quoting Corps guidance stating that "the determination of what constitutes an unreasonable expense should generally consider whether the projected cost is substantially greater than the costs normally associated with the particular type of project.").

[9] *Uphold Our Heritage v. Town of Woodside* (2007) 147 Cal.App.4th 587, 600 (the question when determining economic feasibility of an alternative is not whether a project proponent "can afford the proposed alternative, but whether the marginal costs of the alternative as compared to the cost of the proposed project are so great that a reasonably prudent [project proponent] would not proceed with the [project]").

more expensive or less profitable is not sufficient to show that the alternative is financially infeasible; what is required is evidence that the additional costs or lost profitability are sufficiently severe as to render it impractical to proceed with the project.[10]

Consistent with the evaluation of "cost" or "economic" considerations in comparing potential alternatives under the Section 404 or CEQA, the proposed policy includes the following three criteria for evaluating the cost or economic aspects of alternatives for the disposition of dredged sediment:

- The cost to transport and offload the dredged sediment at a beneficial reuse site in comparison to the cost to dispose of the dredged sediment at an aquatic disposal site.
- The cost of the dredging project and any associated capital improvements.
- The economic benefit and any other benefits of the dredging project and any associated capital improvements.

These criteria are intended to provide the Commission with objective information about the comparative costs of potential alternatives for the disposition of a dredging project's sediment in relation to the total costs of the dredging project. These criteria will also provide objective information about the nature, overall scope, and anticipated benefits of the dredging project, including any associated capital improvements.

III. **Technology or Logistics Considerations**

In evaluating alternatives, the Guidelines provide for consideration of "existing technology" and "logistics," and CEQA provides for consideration of "technological" factors. A potential alternative may be rejected under the Section 404 or CEQA if the alternative is not technically or logistically feasible.[11]

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[10] *Sustainability, Parks, Recycling & Wildlife Legal Defense Fund v. BCDC* (2014) 226 Cal.App.4th 905, 918 *See also, e.g.*, *Citizens of Goleta Valley v. Board of Supervisors* (1988) 197 Cal.App.3d 1167, 1181 (to show an alternative is financially infeasible requires evidence that the additional costs or lost profitability are sufficiently severe as to render it impractical to proceed with the project); *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 736 (determination that an alternative is economically infeasible must be supported by evidence showing that the additional costs or lost profits are so severe that the project would be impractical); *Center for Biological Diversity v. County of San Bernardino* (2010) 185 Cal.App.4th 866, 884 (an alternative that would substantially reduce a significant impact may not be excluded from an EIR on the basis of economic infeasibility absent "meaningful comparative data" coupled with supporting evidence); *Sustainability, Parks, Recycling & Wildlife Legal Defense Fund* 226 Cal.App.4th at 918 (clarifying further that "when the cost of an alternative exceeds the cost of the proposed project, 'it is the magnitude of the difference that will determine the feasibility of this alternative'…Ultimately, 'the question is ... whether the marginal costs of the alternative as compared to the cost of the proposed project are so great that a reasonably prudent [person] would not proceed with the [altered project]'.").

[11] *Compare Friends of Earth v. Hintz*, 800 F.2d 822, 833-834 (9th Cir 1986)(Corps rationally concluded that two alternative sites were logistically infeasible in light of the applicant's legitimate purposes); *and* U.S. Army Corps of

Consistent with the consideration of technological and logistical factors in comparing potential alternatives under Section 404 or CEQA, the proposed policy includes the following two criteria for evaluating the technological or logistical aspects of alternatives for the disposition of dredged sediment:

- Whether there is an available beneficial reuse site.
- The proposed dredging equipment (clamshell, excavator, or hydraulic) and offloading or disposal equipment.

These criteria are intended to provide the Commission with objective information about the availability of beneficial reuse sites and any technological or logistical constraints to beneficial reuse that might be associated with the proposed dredging equipment or offloading or disposal equipment.

IV. **Environmental Considerations**

The Guidelines do not expressly provide for the evaluation of environmental considerations in determining whether an alternative is practicable under Section 404. In contrast, the determination of whether an alternative is feasible under CEQA may include "environmental" considerations. However, both the Guidelines and CEQA in fact require a comparison of the anticipated environmental impacts of a proposed project with the environmental impacts of potential alternatives.

Specifically, under the Guidelines, a proposed discharge of dredged or fill material is generally prohibited "if there is a practicable alternative *with less adverse impact on the aquatic ecosystem*."[12] Under CEQA a potential alternative is to be considered and may be selected if it would avoid or substantially reduce any significant environmental effects of the proposed project.[13]

Engineers Headquarters, Request for Section 404(q) Elevation (Addendum), Klatt Bog 22 (Sept. 28, 1994), at 1 (directing Corps district to "document the determination of why a particular alternative is not practicable because of the lack of existing infrastructure.") *with Center for Biological Diversity v. County of San Bernardino* (2010) 185 Cal.App.4th 866, 885 (affirming trial court determination that evidence was insufficient to show alternative was technologically infeasible); *and Sherwin-Williams Co. v. South Coast Air Quality Management Dist.* (2001) 86 Cal.App.4th 1258, 1277-78 (agency adequately analyzed environmental impacts where there was substantial evidence that existing technology was available to enable manufacturers to comply with air emissions limits in proposed rules).

[12] 40 C.F.R. § 230.10(a) (emphasis added).

[13] Pub. Res. Code § 21002 (public agencies should not approve projects as proposed if there are feasible alternatives which would substantially lessen the significant environmental effects of such projects); 14 C.C.R. § 15126.6(b) (the discussion of alternatives in an environmental impact report shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project).

The proposed policy includes as an environmental consideration whether the dredged sediment from a dredging project is suitable for beneficial reuse. This factor will ensure that beneficial reuse of dredged sediment will not result in adverse environmental impacts, including potential impacts fish, wildlife, or aquatic vegetation.

The proposed policy does not require a comparison of the potential environmental impacts of beneficial reuse with those of aquatic disposal at an in-Bay disposal site or the deep ocean disposal site. A comparison of potential environmental impacts is not required because of certain differences between an alternatives analysis under Section 404 or CEQA on the one hand and an alternatives analysis for the disposition of dredged sediment on the other.

Under Section 404 or CEQA an applicant for a development project is requesting the required approvals to implement its project at either a proposed site or an alternative location. Thus, a comparison of the potential environmental impacts between sites is necessary to determine the preferred alternative. In contrast, an applicant requesting approval for its dredging project does not need to obtain approval to designate an aquatic disposal site or authorize a beneficial reuse site. Instead, the alternatives for the disposition of dredged sediment will be either a previously designated aquatic disposal site at which dredged sediment is authorized to be dumped or a beneficial reuse site which has been permitted to place sediment from a dredging project. Moreover, beneficial reuse of dredge sediment will result in net environmental benefits through restoration of shoreline habitats and the increased resilience of Bay and shoreline habitats to sea level rise while avoiding the adverse environmental impacts of aquatic disposal.

V. **Legal Considerations**

The Guidelines do not provide for the evaluation of “legal” considerations. In contrast, the determination of whether an alternative is feasible under CEQA may include “legal” considerations. Legal considerations that may render an alternative infeasible under CEQA include a legal obligation, or a legal prohibition, limiting an agency’s discretion.[14]

Beneficial reuse of dredged sediment is legally permissible at restoration or other beneficial reuse sites provided the placement of dredged sediment at such sites has been authorized

[14] *See Tiburon Open Space Committee v. County of Marin* (2022) 78 Cal.App.5th 700, 732 (an environmental impact report must reflect any applicable legal obligations that limit the lead agency's discretionary authority; alternatives that conflict with such obligations are legally infeasible and need not be analyzed); *Sequoyah Hills Homeowners Association v. City of Oakland* (1993) 23 Cal.App.4th 704, 715-16 (city did not abuse its discretion when it found that any decreased density alternative would be legally infeasible in light of state law that prevented a local agency from requiring a housing development project to be developed at a lower density provided the project complied with applicable plans, zoning, and policies).

by all regulatory agencies with jurisdiction. Similarly, aquatic disposal of dredged sediment is legally permissible at designated aquatic disposal sites when authorized by all regulatory agencies with jurisdiction. For these reasons, the proposed policy does not include legal considerations as a factor for determining whether beneficial reuse is capable of being done.

VI. **Social Considerations**

The Guidelines do not provide for the evaluation of "social" considerations. In contrast, the determination of whether an alternative is feasible under CEQA may include "social" considerations. Social considerations include policy preferences or socially desirable outcomes.[15]

Consistent with the consideration of "social" factors in comparing alternatives under CEQA, the proposed policy includes the following two criteria for evaluating the social aspects of potential alternatives for the disposition of dredged sediment:

- The economic benefit and any other benefits of the dredging project and any associated capital improvements.
- Any agreements between or among co-applicants for the dredging project and any associated capital improvements.

These criteria are intended to provide the Commission with objective information about the economic benefits and any other benefits of the dredging project, including any associated capital improvements, not only to the project proponent but also to local community or region. These criteria will also provide objective information regarding the local community's or region's support for the dredging project, including any associated capital improvements, as reflected by agreements between or among co-applicants to jointly support or implement the project.

[15] *See California Native Plant Society v. City of Santa Cruz* (2009) 177 Cal.App.4th 957, 1000-01 (in determining that there was no feasible alternative based on "social" considerations, city was justified in rejecting alternatives that it deemed undesirable from a policy standpoint and which did not achieve city's interest in promoting transportation alternatives and ensuring access to open spaces for persons with disabilities); *City of Del Mar v. City of San Diego* (1982) 133 Cal.App.3d 401, 417 (city did not abuse its discretion in rejecting alternatives as infeasible based on social and economic realities in the region; feasibility encompasses desirability to the extent that desirability is based on a reasonable balancing of the relevant factors).