

APPENDIX N

BENEFICIAL REUSE GUIDANCE

Table N-1. Overall Guidance for Wetland Restoration

<i>Type of Issue</i>	<i>Issues to be Addressed During Project-Specific Review</i>
<i>Maximization of Wetland Restoration and Enhancement</i> —Wetland restoration and enhancement using dredged material will be emphasized to enhance and restore the natural resources of the Estuary.	
Site Selection	Water access to the site for dredged material off-loading —deep-water access (-15 to -17 feet MLLW) is optimal
	Evaluate existing habitat functions and document other existing baseline conditions
	Evaluation of proposed site conditions in terms of their suitability for the restoration effort, including: <ul style="list-style-type: none"> • Average elevation of areas to be filled • Tidal range and flood elevation • Alignment and elevation of existing levees • Area available for dredged material use (fill depth) • Total restoration area possible • Typical foundation conditions • Location and size of existing culverts and pumps • Characteristics of the dredged material to be used (e.g., grain size, material density, dredging method, etc.) • Consideration of regional and/or interagency habitat plans (e.g., the Wetlands Ecosystem Goals Project)
	Assessment of utility crossings, easements, and adjacent land uses
Site Construction	Assessment of adequately engineered and constructed perimeter and interior levees
	Analyses of the suitability of proposed spillways and water controls
	Assessment of the feasibility of proposed dredged material off-loading facilities and the adequacy and location of proposed pipelines for transporting dredged material
	Assessment and development of appropriate engineering guidelines for seismic events.
<i>Projects Designed for Ecological Restoration</i> —Projects using dredged material for wetland restoration and enhancement will be designed in a manner that provides for ecological restoration of the site and provides for a diversity of habitat values, particularly for threatened and endangered species. Wetland characteristics specific to special status species must be addressed for the purposes of establishing performance criteria for created systems.	
Site Development	Proximity to a channel with sufficient water depth to allow access by off-loading scows, with little or no hindrance to local navigation
	The ability to moor full scows waiting to be unloaded and empty scows waiting to be towed back to the dredging site
	Evaluation of a suitable off-loading site in terms of proximity to the restoration site and its ability to handle the proposed types of off-loading equipment
	Evaluation of the proposed means for dredged material placement at the restoration site
	Evaluation of the ability to prevent overfilling of the restoration site
Facility	Evaluation of the proposed management of all construction operations and post-construction maintenance
Administration & Maintenance	Evaluation of the proposed inspection and supervision of contractors working on site
Regulatory, Mitigation, & Monitoring Requirement	Determination of the need for federal permits or reviews
	Determination of the need for state permits or reviews
	Determination of the need for local approvals
	Evaluation of proposed mitigation and monitoring plans to ensure compliance with all applicable federal and state regulations and policies
	Consultation per Section 7 of the Endangered Species Act Evaluate proposed projects in terms of their likelihood of success, as shown in monitoring of smaller scale demonstration studies conducted in the Bay Area.
<i>Source: LTMS 1998. p. 5-16.</i>	

Table N-2. Overall Guidance for Rehandling Facilities and Dedicated Confined Disposal Facilities

<i>Type of Issue</i>	<i>Issues to be Addressed During Project-Specific Review</i>
<i>Maximization of Wetland Restoration and Enhancement</i> Wetland restoration and enhancement using dredged material will be emphasized to enhance and restore the natural resources of the Estuary.	
Site Selection	Water access to the site for dredged material off-loading —deep-water access (-15 to -17 feet MLLW) is optimal
	Evaluate existing habitat functions and document other existing baseline conditions
	Evaluation of proposed site conditions in terms of their suitability for the restoration effort, including: <ul style="list-style-type: none"> • Average elevation of areas to be filled • Tidal range and flood elevation • Alignment and elevation of existing levees • Area available for dredged material use (fill depth) • Total restoration area possible • Typical foundation conditions • Location and size of existing culverts and pumps • Characteristics of the dredged material to be used (e.g., grain size, material density, dredging method, etc.) • Consideration of regional and/or interagency habitat plans (e.g., the Wetlands Ecosystem Goals Project)
	Assessment of utility crossings, easements, and adjacent land uses
	Site Construction
Analyses of the suitability of proposed spillways and water controls	
Assessment of the feasibility of proposed dredged material off-loading facilities and the adequacy and location of proposed pipelines for transporting dredged material	
Assessment and development of appropriate engineering guidelines for seismic events.	
<i>Projects Designed for Ecological Restoration</i> — Projects using dredged material for wetland restoration and enhancement will be designed in a manner that provides for ecological restoration of the site and provides for a diversity of habitat values, particularly for threatened and endangered species.	
Site Development	Proximity to a channel with sufficient water depth to allow access by off-loading scows, with little or no hindrance to local navigation
	The ability to moor full scows waiting to be unloaded and empty scows waiting to be towed back to the dredging site
	Evaluation of a suitable off-loading site in terms of proximity to the restoration site and its ability to handle the proposed types of off-loading equipment
	Evaluation of the proposed means for dredged material placement at the restoration site
	Evaluation of the ability to prevent overfilling of the restoration site
Facility	Evaluation of the proposed management of all construction operations and post-construction maintenance
Administration & Maintenance	Evaluation of the proposed inspection and supervision of contractors working on site
Regulatory, Mitigation, & Monitoring Requirement	Determination of the need for federal permits or reviews
	Determination of the need for state permits or reviews
	Determination of the need for local approvals
	Evaluation of proposed mitigation and monitoring plans to ensure compliance with all applicable federal and state regulations and policies
	Consultation per Section 7 of the Endangered Species Act
	Evaluate proposed projects in terms of their likelihood of success, as shown in monitoring of smaller scale demonstration studies conducted in the Bay Area.
<i>Source: LTMS 1998, p. 5-15.</i>	

Table N-3. Overall Guidance for Levee Reuse

<i>Type of Issue</i>	<i>Issues to be Addressed During Project-Specific Review</i>
<i>Beneficial Reuse of Dredged Material for Levee Repair and Stabilization</i> — Use dredged material for levee repair and rehabilitation to the maximum extent possible, taking full consideration of engineering and environmental constraints.	
Site Selection	Evaluation of the suitability of the proposed dredging technique in terms of site limitations (e.g., ability to construct containment facilities for hydraulically dredged material, material stockpile capabilities, etc.)
	Evaluation of the ability to transport material to a site (e.g., deep-water access [-15 to -17 feet MLLW], suitable roadways for land transport of material, etc.)
	Evaluation of proposed site conditions, including: <ul style="list-style-type: none"> • Condition of existing levees • Existing habitat and special status species • Geological engineering evaluations of the ability of levees to handle the weight of the new dredged material for repair/stabilization • Extent of levee repair and stabilization material needed • Characteristics of the dredged material to be used (e.g., grain size, concentrations of chemical constituents) • Cumulative impacts associated with reuse of dredged material for levee repair and stabilization
	Suitability of the location in terms of avoiding impacts to agricultural, industrial, and municipal water supply intakes
Construction	Evaluation of the suitability of proposed material off-loading and on-site placement
	Compliance with identified geo-engineering constraints at the placement site
	Evaluation of the ability to avoid potential adverse environmental impacts (e.g., surface and groundwater, plant communities, sensitive wildlife species, and riparian or other wetland habitat areas)
	Evaluation of proposed site monitoring activities during the construction phase
	Evaluation of the suitability of a levee repair/stabilization site to reduce pollutant concentrations (salinity, metals, etc.) in the dredged material
	Preferential use of sandier dredged material for Delta levee repair and rehabilitation work
	Compliance with applicable design standards for levee repair/stabilization, as specified by state and federal regulations and policies
	Assessment and development of appropriate engineering guidelines for seismic events
<i>Coordinated Approach for Dredged Material Reuse</i> — LTMS agencies will aid, to the extent possible in the development of an organization and a mean of communication between dredgers, the California Department of Water Resources, the COE, and local flood control reclamation districts to identify levee repair/rehabilitation sites that can best use dredged material.	
Facility	Evaluation of the proposed management of all construction operations and post-construction maintenance
Administration & Maintenance	Evaluation of the proposed inspection and supervision of contractors working on site
Regulatory, Mitigation, & Monitoring Requirements	Determination of the need for federal permits or reviews
	Determination of the need for state permits or reviews
	Determination of the need for local approvals
	Evaluation of proposed mitigation and monitoring plans to ensure compliance with all applicable federal and state regulations and policies
	Consultation per Section 7 of the Endangered Species Act
<i>Source: LTMS 1998, p. 5-20.</i>	