

summer, and about 1 to 2.5 feet in winter. To save on pumping costs, water surface levels in the Baumberg systems will be operated at levels lower than existing conditions. Eliminating pumping in winter will result in different operating water levels between summer and winter. The West Bay Ponds will be managed in a similar manner to current salt making operations for at least three years. During this period, high salinity brines will be moved to the Cargill Newark Plant Site. Intake structures needed for the ISP may also be used during this period. Management plans and hydrologic modeling for Initial Stewardship will be completed during that time.

Preliminary Alternatives Identified to Date

The EIS/EIR will consider a range of actions, alternatives and impacts, including the no action alternative. Scoping is an early and open process designed to determine the issues and alternatives to be addressed in the EIS/EIR. To date, the following alternatives have been identified.

No Action

Under the No Action alternative, there would be no flow circulation through the pond systems. No additional water control structures would be installed, no release of pond contents or management of water and salinity levels would occur, and the existing infrastructure would not be maintained. The contents of the ponds would be allowed to evaporate leaving behind salt-crusts flats and in deeper areas, residual pools of concentrated brine. Ponds would take 1 to 2 years to dry. The deepest portions of the ponds will be seasonally wet during winter, filling with water after rain events. Under the No Action alternative, most of the existing open water habitats currently used by wildlife would be eliminated. Without maintenance pond levees and control structures would be prone to failure, increasing risk of uncontrolled intake and release of flows from/to the Bay. Although this alternative minimizes additional inputs of salinity, long-term pond drying may result in hyper-saline soil conditions. This may cause the chemistry of the soil to be affected in a manner that would likely increase the cost and level of effort of future restoration.

Maintain Infrastructure Only

This alternative is the same as the No Action alternative except that the levees and water control structures would be maintained and repaired as needed. The

ponds would be managed as seasonal ponds until the final restoration plan has been completed. Under this scenario the pond contents would be removed or allowed to evaporate. During the summer, they would be maintained as dry to minimize construction and management costs. During winter they would fill during precipitation events but contents would not be discharged. Maintenance of the levees and water control structures would prevent their deterioration that could cause the accidental breaching of the ponds and release of pond contents to the Bay. Under this alternative, most of the existing open water habitats currently used by wildlife would be eliminated, significantly changing the character of the South Bay salt ponds. This alternative minimizes additional inputs of salinity and does not require a permit to discharge pond contents into the Bay. As with the No Action alternative, long-term pond drying may result in hyper-saline soil conditions. This may cause the chemistry of the soil to be affected in a manner that would likely increase the cost and level of effort of future restoration.

Breach Levees of Island Ponds A19, A20 and A21

Under the proposed action, the Island Ponds would be retrofitted with new intake and outlet structures, and managed under a muted tidal condition. Breaching of the levees of each pond would allow the three ponds to return to a more natural tidal regime. Due to their location between Lower Coyote Creek and Mud Slough, the Island Ponds are fairly inaccessible, and therefore, difficult to actively manage. They would be inundated during the high tides but would be above water at other times resulting in 474 acres of intertidal marsh and mudflat habitat. Concerns regarding the breach alternative include increasing the tidal prism of Coyote Creek as well as altering the existing deposition and scour regime of Coyote Creek. Specifically, there is a concern that increased velocities in Coyote Creek could cause scour at the railroad crossing of Coyote Creek.

Seasonal Pond Operations

Under the proposed action, pond systems consisting of numerous ponds generally have one or more pond(s) serving as batch ponds. Due to their location and, in some cases, relatively high bottom elevations, batch ponds do not have continuous water circulation. They do not have a direct hydrologic connection to the bay or tidal sloughs and creeks, but rely on a neighboring pond for delivery of inflows and release

of outflows. The volume and frequency of the intake and release from/to a neighboring pond are used to control the batch pond salinity and water levels. Batch ponds can easily be managed for high salinity in the range of 80–120 ppt to favor brine shrimp and brine fly production, an important food source to certain waterfowl.

As an alternative to a batch pond, certain ponds could be operated as a seasonal pond to eliminate costly pumping during summer to maintain water levels. Seasonal ponds differ from batch ponds in that their contents would be drained prior to summer. Seasonal ponds will fill from rain during winter and be allowed to dry-down through the summer. The pond salinity would not be controlled, but would fluctuate due to residual salt in the pond, rainwater inflows, and seasonal evaporation.

Flexibility in Time Period of Initial Release

Under the proposed action, initial discharge of pond contents would begin in March/April when salinities within the ponds and receiving waters are the lowest. Allowing initial release of pond contents into the Bay at other times during the year would be desirable as a contingency since all necessary water control structures cannot be installed prior to the initial March/April release date. In addition, for certain Alviso ponds, discharge at other time periods would avoid entrainment of juvenile salmonids during downstream migration periods. Concerns regarding this alternative include the ability to meet regulatory requirements for the initial discharge of pond contents and effects of elevated salinity at discharge locations to upstream migrating adult salmonids and bay shrimp.

Content of the EIS/EIR

The EIS/EIR will analyze, describe, and evaluate direct, indirect and cumulative potential environmental impacts of alternatives, including the no project/no action alternative in accordance with NEPA and CEQA. The range of alternatives being considered may be refined, expanded, or revised as a result of the scoping process. Impact analysis will include a discussion of direct and indirect impacts, short- and long-term impacts, cumulative impacts, and unavoidable impacts. For each issue listed below, the EIS/EIR will include a discussion of the parameters used in evaluating the impacts; recommended mitigation, indicating the effectiveness of mitigation measures proposed to be implemented and what, if any, additional measures would be required