

ATTACHMENT 9. PROGRAM PREFERENCES

Att9_IG2_Preference_1of1

The Calaveras River Integrated Water Management Project will assist in meeting the following Program Preferences:

- Include regional projects or programs
- Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; the Regional Water Quality Control Board (RWQCB) region or subdivision; or other region or sub-region specifically identified by DWR
- Effectively resolve significant water-related conflicts within or between regions
- Contribute to attainment of one or more of the objectives of the CALFED Bay-Delta Program
- Address critical water supply or water quality needs of disadvantaged communities within the region
- Provides multiple benefits, including, but not limited to, water quality improvements, ecosystem benefits, reduction of instream erosion and sedimentation, and groundwater recharge

The Project also address the following Statewide Priorities:

- Drought Preparedness
- Use and Reuse Water More Efficiently
- Climate Change Response Actions
- Expand Environmental Stewardship
- Protect Groundwater Quality

The certainty, breadth, and magnitude of the proposal providing the addressed Program Preferences are reported in Table 44. The certainty, breadth, and magnitude of the proposal providing the addressed Statewide Priorities are reported in Table 45.

Table 44 - Certainty, Breadth and Magnitude of Program Preferences Addressed

| Program Preferences Addressed | Certainty | Breadth and Magnitude |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Include regional projects or programs | High. The Proposal integrates elements of Calaveras River flood control without third-party impacts, and provides significant regional water management benefits | Will provide internal drainage protection to nearly 1,700 homes; Stormwater outfall to the Calaveras River will be mitigated by diverting an equal or greater rate upstream for groundwater recharge |
| Effectively integrate water management programs and projects within a hydrologic region identified in the California Water Plan; the Regional Water Quality Control Board (RWQCB) region or subdivision; or other region or sub-region specifically identified by DWR | | Makes use of local flood waters for groundwater recharge; Initiates large-scale conjunctive management in the basin; Recharges up to 27,700 acre-feet per year |
| Effectively resolve significant water-related conflicts within or between regions | Moderate. The critical overdrafted Eastern San Joaquin Basin is the source of conflict within the Region, and leads to competition for additional supplies from the Sacramento Valley, San Joaquin Valley and Delta. The Proposal would make use local flood waters for groundwater recharge, lessening these conflicts | Conjunctively recharges up to 27,700 acre-feet per year; Provides up to 17,400 acre-feet per year of reliable alternative supply for urban users |
| Contribute to attainment of one or more of the objectives of the CALFED Bay-Delta Program | High. Large groundwater storage potential allows for changes in timing of withdrawals from the Delta and tributary streams, and increases water supply reliability | Increases urban water supply reliability; Provides up to 17,400 acre-feet during dry years, reducing demand on the Delta and tributary streams; Raising water tables 1.3 feet per year will decrease stream channel seepage and increase flow to Delta |
| Address critical water supply or water quality needs of disadvantaged communities within the region | High. Increases water supply reliability in a predominately disadvantaged region. Raised water table will stop or slow saline water migration into potable water aquifers | Provides reliable water supply of up to 17,400 acre-feet per year at a cost 70% below the next best alternative |
| Provides multiple benefits, including, but not limited to, water quality improvements, ecosystem benefits, reduction of instream erosion and sedimentation, and groundwater recharge | High. Provides stormwater management and damage reduction and groundwater recharge as principal functions; Provides waterfowl nesting habitat as a secondary function | Protects nearly 1,700 residences from 100-year flooding; Recharges up to 27,000 acre-feet per year, and provides a net recharge of 10,800 acre-feet per year. |

Table 45 - Certainty, Breadth and Magnitude of Statewide Priorities Addressed

| Statewide Priorities Addressed | Certainty | Breadth and Magnitude |
|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Drought Preparedness | High. Provides efficient groundwater basin management; conjunctively manages floodwater, surface water and groundwater; and provides alternative dry year supply | Recharges up to 27,000 acre-feet per year of stormwater and surface water, and provides a an alternative dry-year groundwater supply of up to 17,400 acre-feet per year |
| Use and Reuse Water More Efficiently | High. Proposal will capture, store, and use stormwater runoff through percolation to usable aquifers for subsequent treatment and urban use in dry years | Recharges up to 27,000 acre-feet per year of stormwater and surface water, and provides a an alternative dry-year groundwater supply of up to 17,400 acre-feet per year |
| Climate Change Response Actions | High. Recharging overdrafted groundwater basin with stormwater and other water will increase basin water levels and reduce pump lift and energy use and its associated greenhouse gas emissions | Net groundwater recharge of 10,800 acre-feet per year will raise regional groundwater levels an average 1.3 feet per year, or over 60 feet over the project life. This will reduce energy consumption by an average 6,700 MWh per year over the project life. At the current mix of PG&E power sources ¹ , this will reduce greenhouse gas emissions by an average 3.5 million pounds per year |
| | High. Will advance and expand conjunctive management of multiple water supply sources | Incorporates use of stormwater runoff as part of an overall conjunctive management strategy making use of local supply for storage and subsequent dry-year recovery |
| Expand Environmental Stewardship | Incidental. Project will include wildlife habitat within percolation ponds | Design will be based on already operating recharge ponds at the SEWD site which incorporate habitat islands |
| Protect Groundwater Quality | Moderate. Raised groundwater levels will slow or stop eastward movement of saline water into production aquifers | The USGS has stated that the only sure way to stop the saline migration is to flatten or reverse the groundwater gradient; Recharge of a net 10,800 acre-feet per year is expected to raise groundwater levels up to 1.3 feet per year, reducing, and ultimately reversing the eastward flow |

Notes:

¹ GEI Consultants, August 2011, "Freeport Element of the American River Use Strategy, Phase I: Final Draft Feasibility Study", p.7-15



