

ATTACHMENT 9 – NEED

**San Gabriel and Lower Los Angeles Rivers Watershed
IRWM Implementation Grant, Step 1**

In the San Gabriel and Lower Los Angeles Rivers Watershed a diverse group of agencies and organizations manage systems and programs to provide reliable drinking water, flood protection, water quality, habitat, and open space. The Region's long-term regional watershed management needs are the basis for the draft Integrated Regional Water Management (IRWM) objectives identified in Table 6 of the Framework IRWM Plan included as Attachment 3 of this implementation proposal. These objectives have been grouped in five water management focus areas which include: water supply reliability and water quality protection and improvement; groundwater management and conjunctive use; stormwater capture and management, surface storage, and flood management; watershed management, habitat enhancement, and recreation; and water recycling, reclamation, and conservation. This implementation proposal contains projects that focus on all five water management area needs and address the following issues: 1) an increasing demand for and possible reductions of, available potable water, 2) the increasing burdens on an aging flood management system, 3) impaired water quality, and 4) the continued loss of open space and habitat areas.

Economic Impacts- Project components that target water conservation, groundwater recharge and increased use of recycled water provide an economic benefit to the Region. For example, consumers receive a lower rate as an incentive to convert to using recycled water rather than importing water for irrigation, commercial and industrial use. Since recycled water has become economically viable as compared to the cost of potable water and is virtually drought-proof, there is a strong economic incentive for businesses in the area to use recycled water. This reduction in cost is also passed on to the individual consumer, which includes residents of disadvantaged communities.

Environmental Impacts- Over the years, environmental resources have been heavily impacted throughout the Region. Habitats for native plants and animal species have been displaced and severely fragmented. Through native planting, wetland and riparian restoration, and improved water quality, the various components of this implementation proposal will positively impact the environmental resources and ecological process within the Region.

Fiscal Impacts- The proposal will provide a large fiscal benefit to the agencies involved as well as the communities they serve. Continued development will place increasing pressure to develop the remaining open space parcels, which will also reduce their groundwater recharge capacity and runoff capture. As a result, average flood loads will rise, forcing costly mitigation projects. Spreading basins will bear an increasing burden for groundwater recharge as natural recharge is reduced. Increases in runoff will also increase the total daily loads of significant non-point source pollution, requiring more costly investments to comply with regulations.

Critical impacts-

Many of the projects within the proposal will not be completed or will take considerably longer to complete without grant funding. The critical impacts that will be seen without implementation of these projects may include loss of the remaining open space and habitat parcels, as well as costly capital improvement projects to update the flood control, water supply, and water quality management systems. The Los Angeles Basins groundwater reserves are finite and the Region's needs have surpassed the natural rates of recharge long ago. As a result, the Region has been dependent on imported water for almost 100 years. The availability of imported water is being contested on a consistent basis by users in other regions where the water originates; therefore, it is critical that the most efficient use is made of both local groundwater and imported resources. Obtaining adequate water to support its population is one of the most important issues for the Region.

1. El Dorado Park Lakes Water Usage and Wetlands Restoration

This project will replace the use of groundwater with reclaimed water that would normally be wasted to the ocean. This project will save 400 acre-feet annually, and demonstrate how to save additional source water by providing a new use for reclaimed water. In addition, due to development, interregional migration routes have been disrupted. This project will help restore a small area of that habitat. Most of this area will include wetland enhancement, which will encourage interregional migrations along the San

Gabriel River and Coyote Creek corridors, two corridors critical in regional plans to reconnect scattered surviving native habitats.

If this project is not implemented, the City of Long Beach will continue to use potable well water to fill the artificial lakes in El Dorado Regional Park and the Nature Center. As water becomes more expensive, the City would be forced to stop filling the lakes with water and allow them to dry up, which would reduce the wetland habitats for indigenous and migrating species. In addition, since the demonstration of nano-filtration technology would not occur, the use of reclaimed water would not become as widespread, thereby increasing the need for costly and imported water.

2. Full Capture Trash Removal Devices

The full capture trash removal devices will help to meet current Trash TMDL requirements adopted by the Los Angeles Regional Water Quality Control Board and help to improve the overall water quality of the downstream waterbodies. The project will help to meet long-term regional water management needs by preventing the deposition of trash in Compton Creek, and ultimately the Los Angeles River, by removing it from tributary storm drains. These devices will prevent the trash from negatively impacting downstream habitat and natural areas, which will result in a cleaner environment in and adjacent to the Los Angeles River and its tributaries, as well as the downstream beaches and harbor.

3. Invasive Weed Control in Riparian Habitat

Removing exotic vegetation, which requires more water than native vegetation, reduces demand on groundwater in riparian areas. This process increases the available water supply for other uses. By preventing re-infestation of exotics, long-term groundwater supplies will be protected from over-consumption in riparian areas.

4. Large Landscape Conservation/Runoff Reduction Management and Educational Program

This project helps meet long-term regional water management needs by providing both hardware and education. By providing weather-based irrigation controllers to large landscape customers, this project will conserve water, as well as into the future. Also, by providing landscape classes and rebates for residential controllers, this project will motivate the public to install weather-based irrigation controllers, plant native plants, and install drip irrigation. Each of these measures will contribute to conserving water, thus increasing water supply reliability and reducing runoff. This reduction in urban runoff will improve water quality in local waterways and the ocean. Through the landscape classes, Central Basin will disseminate information about the water supply and water quality issues associated with urban runoff throughout the Region.

5. Montebello Forebay Attenuation and Dilution Studies

Groundwater recharge is the largest use of recycled water for this Region and this study would provide additional information to support and continue this practice. If recycled water is not part of the groundwater management strategy, costly imported water, which may not be available when necessary, would have to be purchased. If this project is not implemented, costly treatment plant upgrades to meet the final effluent limits may have to be constructed. Such upgrades are premature because the appropriate levels needed to protect all designated beneficial uses are unknown at this time. The cost of additional treatment would be borne by millions of residents within the Region. The results of this study are necessary to determine site-specific permit limits that protect all beneficial uses and are determined to be appropriate for the discharge of recycled water within the Montebello Forebay. If it is necessary to limit the amount of recycled water used for groundwater recharge, the need for an alternate water supply would be necessary.

6. Morris Dam Water Supply Enhancement Project

This project will result in an increased yield of approximately 5,720 acre-feet annually in the Main San Gabriel Basin, thereby reducing the purchase of Metropolitan Water District (MWD) supplies. This benefits the CALFED Bay-Delta area since a reduction in MWD demand also reduces the demand on water that originates from the environmentally sensitive Bay-Delta, especially during dry periods. The increased groundwater yield provided by the project will help to reduce the supply-and-demand mismatch

that is occurring in the Bay-Delta. The project also improves the Bay-Delta water quality for all users, the aquatic and terrestrial habitats, and its ecological functions.

This project will address long-term regional water management needs by allowing increased flexibility in providing native water to the San Gabriel River. Increasing effective storage at the dam and modifying the valves and control system will greatly enhance the reliability of local groundwater and surface water supplies, which is critical in years of low rainfall. Additional flows released from the dam will potentially increase riparian habitat along the river and provide more water for native aquatic species. Without this project, additional imported water would be purchased from MWD that would result in an average annual water conservation benefit of approximately \$1.8 million annually at today's water cost or approximately \$90 million over the next 50 years, at the current water cost.

7. Peck Water Conservation Park

Developing projects at Peck Road Water Conservation Park will directly address the long term needs of the watershed by increasing groundwater infiltration, reducing the burden on the flood control system, protecting permeable surfaces for groundwater recharge, and expanding habitat. The park will be permanently preserved and maintained as an open space and groundwater recharge facility that will retain storm water for infiltration on site. Habitat restoration projects at the site will support and accommodate flourishing migratory bird and native plant and animal populations. The additional vegetation planted at the park will reduce downstream runoff and filter water and airborne pollutants. New entryways and a bus shelter serving the three regional bus companies will provide greater public access and enjoyment of open space resources for the community.

8. Southeast Water Reliability Project, Phase I Water Recycling

For the last six years, the Colorado River has been in a state of drought. Because of this situation, the use of reclaimed water for non-potable applications is vital. This project will reclaim secondary treated wastewater, treat it to Title 22 standards, and distribute 800 acre-feet of water to 28 sites. In conjunction with Phase II of this project, the Central Basin Water Recycling System will be looped, providing 9,600 acre-feet of recycled water annually. If the project is not implemented, then the users in the cities would continue to use groundwater and/or imported water to meet their demands. By providing recycled water as an option at a lower rate, the users will be saving money and potable water. The more water that is reclaimed, the less discharge of tertiary treated wastewater that goes into the San Gabriel River and out into the ocean. This project will improve the water quality, which positively affects the environment, including the local and regional habitat.

9. Whittier Narrows Conservation Pool

This project helps meet long term regional water management needs by reducing the Region's reliance on imported water sources, conserving an additional 2,900 acre-feet per year of stormwater, and providing a surface water quality improvement in what would otherwise be urban runoff. The regional economic and fiscal impacts of the project are best characterized by the reduced imported water purchases that the Water Replenishment District of Southern California (WRD) will be required to make. Based on current imported water costs, this project will save WRD nearly \$800,000 per year. This annual savings will be passed on to the nearly four million water users within WRD's service area.

10. Whittier Narrows Water Reclamation Plant UV Disinfection Facilities Project

The operation of the Whittier Narrows Water Reclamation Plant (WNWRP) is an important part of regional watershed and groundwater management through the practice of conjunctive use. This project will enhance the quality of recycled water from the WNWRP used for groundwater recharge in the Central Basin and will ensure that recharge continues at current levels. It also results in improved water quality in the Rio Hondo. By improving the water quality of reclaimed water, it also protects water supply reliability through the continued use of a drought proof resource, making the region less reliant on imported water.

The water recycling and reclamation of WNWRP effluent provides an economic benefit to the surrounding communities, a large proportion of which are disadvantaged. This reclaimed water is less expensive than imported water. The improved water quality will also lead to enhancement of downstream habitat and will support recreational activities.