

4 Partnership and Multi-benefit Opportunities

Implementation of projects is the vehicle to attaining the objectives and planning targets discussed in Section 3. Integration and collaboration can help these projects achieve synergies and increase their cost-effectiveness in meeting multiple objectives. The GLAC IRWM Region provides a wealth of potential multi-benefit project opportunities for partnership projects including:

- **Local Supply Development:** Alternative supply development such as distributed stormwater capture and recycled water projects are often too costly for a water supply agency to construct on their own for water supply purposes only. The near-term unit cost can be well in excess of the cost of imported water. However, other funding partners focused on the other benefits (like water quality) these projects could provide are often available to help with funding for implementation.
- **Improving Stormwater Quality:** The GLAC Region has prioritized drainage areas based on their ability to improve water quality for the coastal and terrestrial waters. Integrated projects that can provide water quality benefits can be cited relative to that prioritization to achieve the highest benefits.
- **Integrated Flood Management:** Earlier studies, such as the Sun Valley Watershed Plan, demonstrated the potential for similar cost-effective synergies between flood control, stormwater quality management, water supply, parks creation and habitat opportunities. Flood control benefits usually reached through a significant pipe construction project can be accomplished with alternative multi-benefit projects.
- **Open Space for Habitat and Recreation:** When habitat is targeted for restoration, there are often opportunities for cost-effective implementation of flood control, stormwater management and passive recreation walking and biking trails as well.

These synergies and cost effectiveness outcomes can best be attained when the unique physical, demographic and agency service area attributes of the region are considered in meeting the multiple objectives of the IRWM Plan. The GLAC IRWMP has developed tools to assist the GLAC IRWM Region in identifying areas and partnerships conducive to both inter-subregional and intra-subregional integrated project development. This section discusses these tools as well as some preliminary analyses on the North Santa Monica Bay Subregion's potential partnerships and integrated project opportunities.

4.1 GLAC IRWMP Integration Process and Tools

As part of the objectives and targets update process, the GLAC Region compiled and developed several geo-referenced data layers to assist in spatially identifying priorities and potential opportunities to achieve water supply, water quality, habitat, recreation and flood management benefits. These data layers were initially used individually to determine the objectives and planning targets for each water management area. However, these datasets can also be overlaid to visually highlight areas with the greatest potential to provide multiple benefits. The resulting Potential Benefits Geodatabase (Geodatabase) can also align these areas relative to other layers containing agency service areas and jurisdictions – allowing for project proponents and partners to be identified.

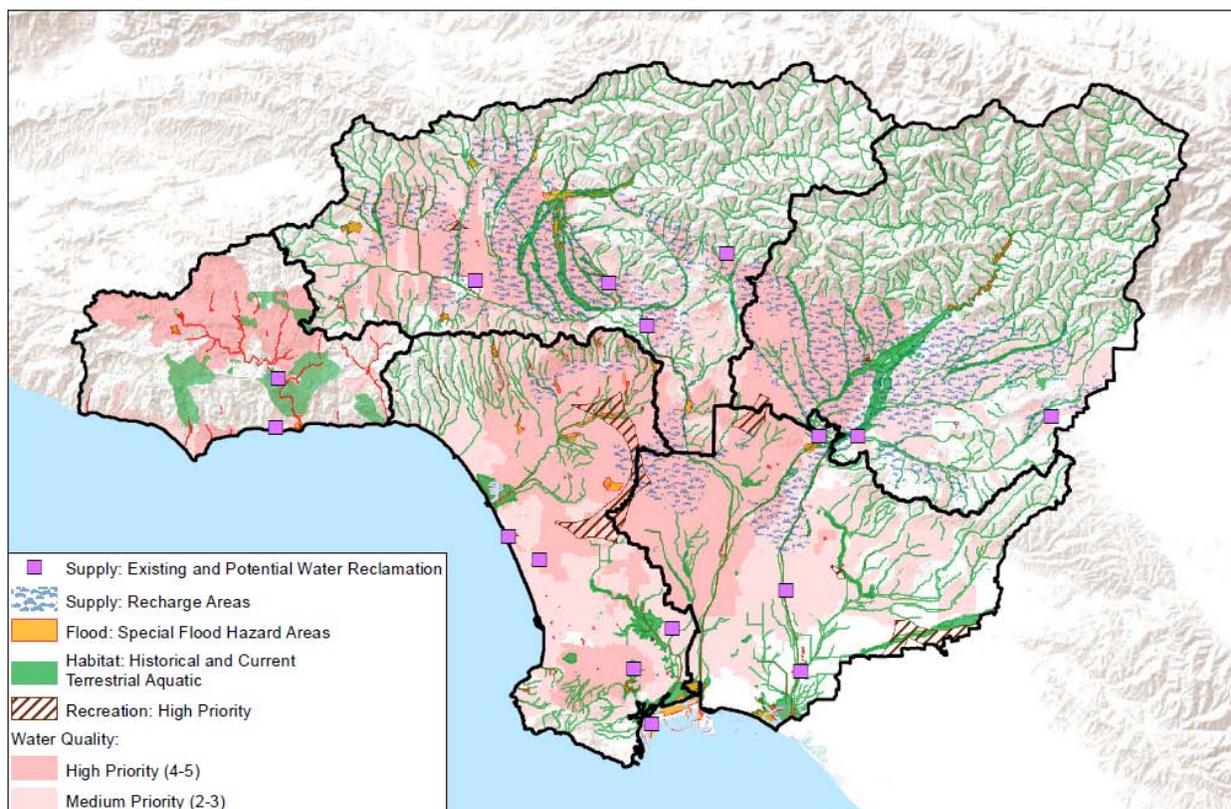
Potential Benefits Geodatabase

The GLAC IRWMP Potential Benefits Geodatabase is a dynamic tool that should be updated as new data is made available in order maintain its relevance in the IRWM planning context. However, in order to provide an analysis of potential integration and partnership opportunities for the 2013 GLAC IRWM

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Plan, current data layers were overlaid and analyzed. The key layers used are shown in Figure 16 and described in Table 7. It should be noted that these datasets may not be complete or in need of further refinement – which is part of the dynamic process previously described. Therefore, the Geodatabase should only be used as an initial step in identifying multi-benefit potential and by no means used to invalidate the potential for achieving benefits in other areas.

Figure 16: GLAC Region Potential Benefits Geodatabase Layers



Using the Geodatabase

The Geodatabase is a dynamic visual tool. The data layers and maps shown in this Section are only some of a multitude of ways to package and view the datasets to help with the integration process. It is important to note that not all data that could be useful in identifying integration and partnership potential for the region is easily viewed spatially in this format. Therefore the Geodatabase should only be used as one of several potential integration tools or methods.

The Geodatabase can also be used to identify the potential for further integration between existing projects included in an IRWMP. Currently the GLAC Region has web-based project database (OPTI) that geo-references all projects included in the IRWM. As part of the 2013 Plan Update, this dataset of projects will eventually be updated and prioritized. This resulting project dataset could be included as a layer in the Geodatabase or conversely, the existing Geodatabase layers could be uploaded to OPTI for public viewing. Either way, by overlaying the current projects on top of the potential benefit layers, additional benefits could be added to existing project or linked to other projects and proponents through those benefits.

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Table 7: Potential Benefit Geodatabase Layers

Data Layer	Description
Supply: Recharge Areas ¹	Shows areas where soils suitable for recharging are above supply aquifer recharge zones. Thereby indicating that water infiltrating in these areas has the potential to increase groundwater supplies.
Supply: Existing and Potential Water Reclamation ²	Shows locations of existing wastewater and water reclamation plants.
Flood: Special Flood Hazard Areas ³	Shows some of the areas that would benefit from increased drainage to alleviate flooding potential.
Habitat: Historical and Current Terrestrial Aquatic ⁴	Shows the combined current and historical habitat areas that would indicate the potential for aquatic habitat protection, enhancement, or restoration benefits to be derived. (Note: North Santa Monica Bay Subregion did not have similar data so it shows Significant Ecological Areas instead ⁵ .)
Recreation: High Priority ⁶	Shows areas that have the greatest need for open space recreation given the distance from current open space recreation sites.
Water Quality: Medium and High Priority ⁷	Shows watershed areas with medium and high priority and therefore relative potential to improve surface water quality.

¹ Created using Los Angeles County's groundwater basins shapefile overlaid with soils and known forebays shapefiles

² Created by RMC Water and Environment for the Los Angeles Department of Water and Power's Recycled Water Master Planning program to show sources of wastewater that could be made available for recycled water use.

³ Created by Federal Emergency Management Agency to define areas at high risk for flooding (subject to inundation by the 1% annual chance flood event) and where national floodplain management regulations must be enforced

⁴ From *Regional restoration goals for wetland resources in the Greater Los Angeles Drainage Area: A landscape-level comparison of recent historic and current conditions using GIS* (C. Rairdan, 1998) and additional current terrestrial aquatic habitat is based on the extent of current habitat derived from the National Wetlands Inventory.

⁵ Significant Ecological Areas are those areas defined by Los Angeles County as having ecologically important land and water systems that support valuable habitat for plants and animals.

⁶ Created for the *GLAC IRWM Open Space for Habitat and Recreation Plan (2012)*, and shows where there is less than one acre of park or recreation area per one thousand residents.

⁷ Created for the *GLAC IRWM Surface Water Quality Targets TM (2012)*, which ranked catchments based on TMDLs, 303(d) listings and catchments that drain into Areas of Special Biological Significance (ASBS).

4.1 Integration Opportunities in South Bay

Based upon Figure 17, the North Santa Monica Bay Subregion is notable relative to other subregions in a few ways:

- There is the least need for recreation and open space.
- There are urbanized upstream areas with stormwater quality and potential flood impacts on downstream urban areas and sensitive offshore habitat areas.

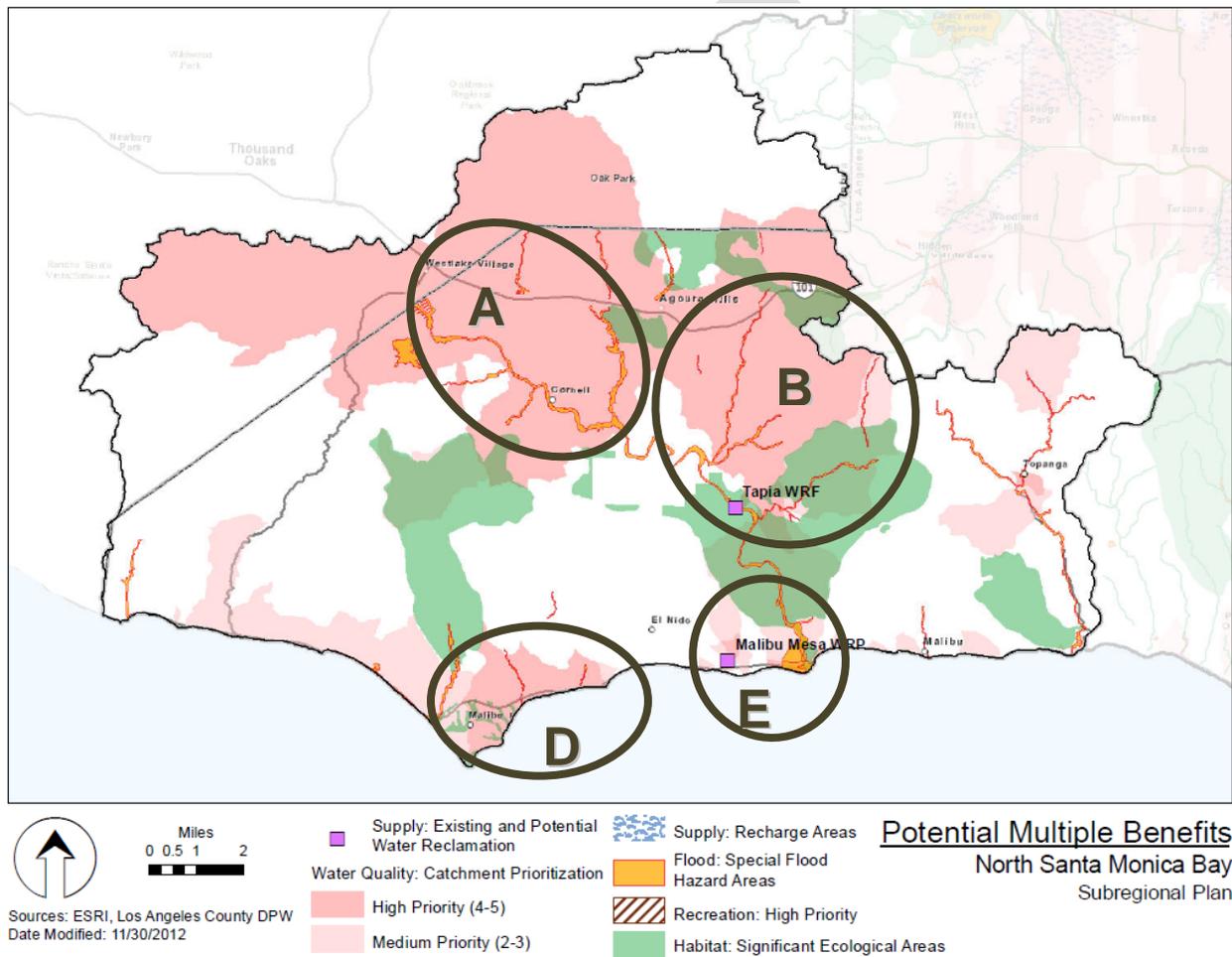
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- There are less concrete streambeds than other subregions and the potential to more easily return channelized streambeds to natural streambeds and habitat areas.

What is not seen in the map, but is true of the North Santa Monica Bay subregion, is that relative to other subregions, the North Santa Monica Bay is heavily dependent upon imported water supplies given limited groundwater recharge potential. Therefore local supply development anywhere within the subregion would be considered to provide great benefits.

The following sections highlight a few areas in the North Santa Monica Bay Region where integration and partnership opportunities could be found based upon the Geodatabase layers and multiple benefit analysis performed.

Figure 17: GLAC Region Potential Benefits Geodatabase Layers



A: West Lake Village an Agura Hills Integrated Flood Management and Water Quality

This area is a priority area for water quality issues as well as flood issues. Additionally, capturing stormwater for onsite use has the potential to reduce imported water supplies. There could also be opportunities to return channelized streams to more natural systems with habitat restoration as an added benefit. Projects could provide multiple benefits when coupled with water quality improvement

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components and flood management. Removal of non-native species in the upper watershed is also an opportunity for this area.

There is the potential for partnerships between LACFCD, Santa Monica Mountains Conservancy, State Parks, and the cities of Westlake Village Agoura Hills.

B. City of Calabasas Supply, Water Quality and Flood Management

The City of Calabasas is on the border between the Upper Los Angeles River Watershed and the North Santa Monica Bay Subregion and therefore provides an opportunity for collaboration between these two subregions. This area is also a priority area for water quality improvements and integrated flood management that could further enhance habitat benefits for the Region by returning channelized streams to more natural systems. The proximity to a reclaimed water source could also incorporate a water supply benefit into projects developed in this area. Partnerships between the City of Calabasas, LACFCD and local watershed groups could generate the multiple benefit projects.

D. Point Dume and South East Coastal Watershed Protection of ASBS

This coastal area adjacent to an offshore significant habitat area and designated area of special biological significance (ASBS) has special need for water quality best management practices to protect the ASBS. This area is also provides good opportunities for habitat restoration and partnerships between the City of Malibu and LACFCD.

E. Malibu Creek Habitat and Water Quality and Supply

This coastal area near and including Malibu Lagoon has great potential for habitat restoration, water quality protection and flood protection. Encouraging above ground collection of rain water in nearby residential and retail communities can also help reduce dependence on imported water while removing some potential for flooding and stormwater quality impacts. Partnerships between the City of Malibu, the Santa Monica Bay Restoration Commission, and LACFCD could result in integrated projects for the Subregion.