

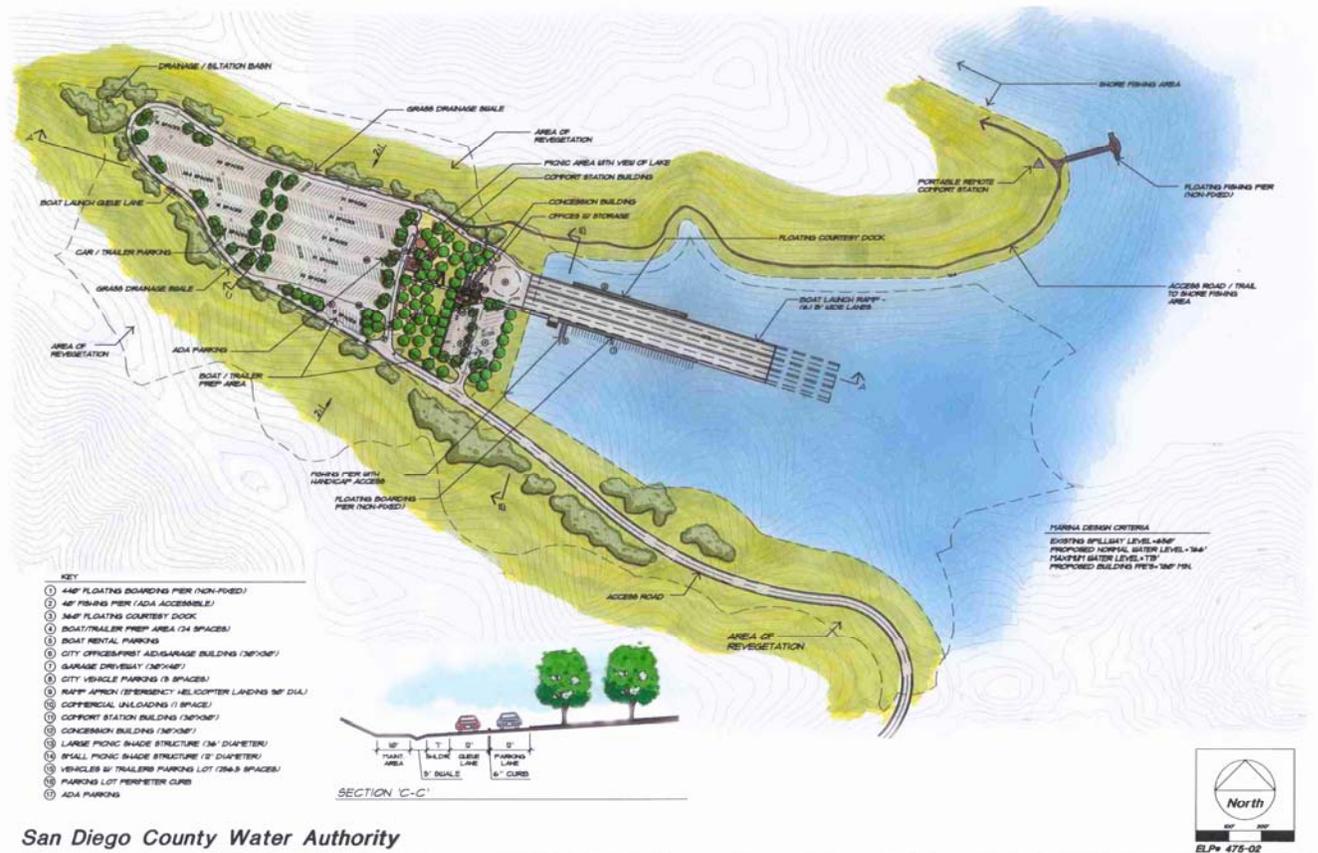
Appendix A

Recreational Master Plan Update for the Carryover Storage and San Vicente Dam Raise EIR/EIS

Prepared by Estrada Land Planning

The Master Plan for San Vicente Reservoir

The Recreation Master Plan for the System 5 San Vicente Reservoir Alternative is indicated in Figure 1. This master plan proposes expanded boating and fishing opportunities at the reservoir, replacing the facilities inundated due to the project implementation. It was requested by the San Diego Water Utilities Department that the lost facilities (i.e.-parking lots, buildings, and boat launches), be replaced and provisions made to redesign these areas to accommodate twice the facilities. The rationale for this request was, since the reservoir's recreational uses are already in high demand and additional surface area will be available with the Project, the current facilities would be insufficient to handle the future demand. This request was incorporated into the proposed master plan.



San Diego County Water Authority
 Proposed Marina Area
 San Vicente Reservoir Recreation Master Plan

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Figure 1. San Vicente Recreation Master Plan

The following summarizes the recreation plan for the San Vicente Reservoir Alternative:

The Marina

The current reservoir allows for a variety of boating activities that are based at the marina. The marina will be replaced as the new high water line inundates the existing facilities. The new marina, shown in Figure 2, will be located in the narrow valley west of the present facility. The marina will move to a higher elevation, above the 766' normal water level. Extensive grading will be required to situate the new marina layout. The new marina location allows for adequate buffer between the surge control facility outlets located to the Southeast of the marina. The buffer will allow for the dissipation of any turbulence from the entry of water coming from the surge control outlet, prior to reaching the boat launch ramp.

The marina will remain the focus of the recreational activities at the reservoir, and will include a 775-foot long concrete boat launch ramp with six lanes, a 440-foot floating boat dock with 40-slips for rental boats, a courtesy boarding dock, ADA accessible fishing pier, floating dock office/storage space, city office building, parking for 117 cars and 200 vehicles with boat trailers, and handicapped parking spaces in both parking areas. It should be noted that the replacement boat dock will be a non-fixed floating dock that will adjust to the fluctuations of the water levels, allowing boat access to the reservoir at all times.

The boat launch ramp could possibly be extended an additional 200-feet for additional access to the reservoir during low water level periods. The County Water Authority is also considering the use of temporary concrete mats placed near the existing launch ramp, allowing recreational use of the reservoir at low water levels during the construction phase of the dam.

The proposed marina facilities will continue to provide the main access to the reservoir for pleasure boating, water skiing and fishing. To maximize this access the boat launch ramp should be designed to extend three feet above the high water line and three feet below the reservoir's minimum operating pool. As an additional amenity, the marina will include a comfort station, concession building, outdoor picnic area with shade shelters, and landscaped parking areas.

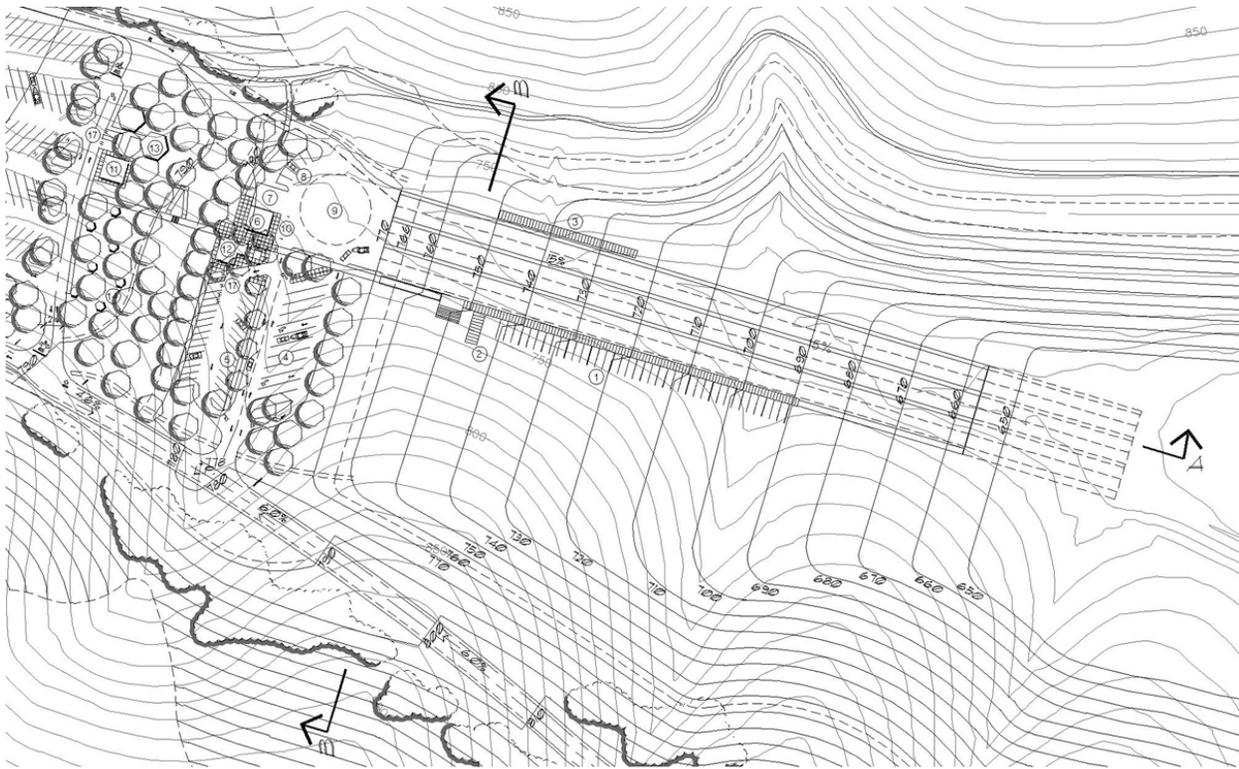


Figure 2. Marina Area

Grading and Drainage

The site grading and drainage design considers the need to capture runoff and provide a measure of filtration prior to conveying the runoff to the reservoir. The intent is to filter most pollutants and silt to maintain an acceptable level of water quality in the reservoir. The parking lot has been designed with a crown to convey surface runoff toward the edges, where the runoff can be captured and conveyed through the parking area perimeter curb into temporary-irrigated grass swales, then into the reservoir. As an option, parking lot surface runoff could be captured in below-grade drainage systems and filtered by fossil fuel filters, prior to conveyance to the reservoir. A combination of both ideas may be implemented.

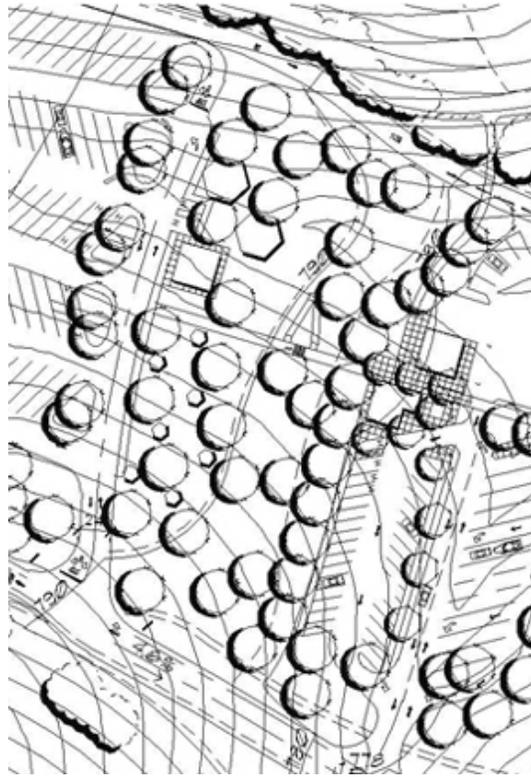


Figure 3. – Picnic Area

Picnic Area

A new picnic area (less than one acre) is also proposed in the marina area between the boat dock and the car / trailer parking.

The picnic area would be planted with a mix of deciduous and evergreen large canopy trees to provide shade. The proposed picnic areas would improve upon the existing picnic facilities by providing shade shelters and several trees for shade and a cool microclimate on hot days.

The picnic area would be comprised of two large group and seven small group picnic shelters. The large group picnic shelters are intended to accommodate large groups for events such as the annual fishing derby tournament. The areas around the large shelters would consist of concrete paved areas under and around the immediate perimeter of each unit, with paved walkways for ADA access. Each large group shelter would consist of seven picnic tables, six trash receptacles, and one large barbecue unit.

A typical small picnic shelter would have a level concrete pad to support a picnic tables, trash receptacles and barbecue unit. Decomposed granite would comprise a majority of the spaces providing accessibility between the trees, picnic shelters, parking and native slope plantings.

Site Landscape

The landscape design goals are to provide a landscape that is contextual, low-maintenance, and drought-tolerant. The site will require extensive grading and should consider temporary BMP measures to control erosion while the dam is being constructed. An erosion control hydroseed mix of native plants and grasses, with cover crop, would be appropriate for all the disturbed slope areas. The limits of disturbance are too large for irrigation of the erosion control to be impractical.

The slope located between the picnic area and marina parking should consider the use of temporarily irrigated, low-growing, native grasses and shrubs (from containers) to retain the slope. The picnic area and parking lot landscaping should consist primarily of deciduous and evergreen trees in mulch basin surrounded by decomposed granite pavings. The perimeter landscaping should consist of temporarily- irrigated, native trees (container stock only) and non-irrigated hydroseeded shrub plantings, providing a natural look that is contextual to the surrounding mountains.

Boating

With the increase in the water surface area due to the increased water capacity of the reservoir, boating activity is anticipated to increase. With this expected increase of activity, a larger car / trailer parking area will be provided (described earlier in the Marina section). San Vicente Reservoir will continue to offer the wide range of boating activities which allow for: sail boats, power boats, row boats, inflatable boats and rental power boats. As with present conditions, boating would be restricted to daylight hours only.

Water skiing would still be permitted under the same rules and restrictions that currently apply. Swimming or any other direct body contact to water would not be permitted.

Access

- Access from SR-67

A new signage program should be installed along SR-67 to identify the directions to the reservoir entry. This program would establish Vigilante Road as the major access to the reservoir. This new signage program would potentially alleviate traffic that now travels through the residential area, on Moreno Avenue, to get to the reservoir.

- Marina Access Road

The existing access road was constructed in the late 1940's. It is extremely steep and has a number of curves that are difficult to negotiate. A new road to the marina will be constructed and will have a maximum grade of 12% with the design of the curves at 500 feet or greater. This new access road would begin at the entry station at San Vicente and follow in the general alignment of the existing road. See Figure 6 for a more specific location. The road will provide a gradual slope to the lower marina parking lot entrance where grades flatten out for a safe transition to any of the facilities.

Marina Vehicle Circulation

The marina has been designed with a simple circulation plan. All vehicles will approach the site via the new marina access road proceeding past the lower marina parking lot to either the boat launch queue lane or the parking lot. Signage shall be posted at the lower marina parking lot entrance to deter vehicles with trailers from entering this area. Vehicles with trailers will enter directly into the queue lane for access to the boat launch ramp. Upon entering the queue lane, boaters have the option to enter into the boat / trailer preparation area, allowing for a safe area to untie boats from trailers or transfer equipment to the boat. This option will aid in a faster launching operation on the launch ramp, minimizing delays. Upon completing the launching of boats, vehicles then exit through the lower marina parking area and proceed to the main parking lot.

To retrieve boats from the reservoir, boaters will exit the parking lot at the southwest corner, enter the queue lane, approach the launch ramp apron and retrieve the boat from the water. Vehicles would then exit to the lower marina boat / trailer preparation area to secure boats to the trailers prior to leaving the marina facility.

A perimeter curb is proposed for providing separation between the main parking lot and the boat launch ramp queue lane vehicles. The perimeter curb contains the parking lot circulation and requires entering and exiting at one location only. The installation of the curb will eliminate the 'cutting' into the queue lane, which is a major complaint from boaters on a daily basis.

Beach Picnic Area - Boat Access Only

Presently, small beach picnic areas are located wherever there is a relatively level sandy spot. Because of the steep nature of the terrain surrounding the reservoir, boats are the only way to access these beaches. All of these beaches will be inundated when the Project is implemented.

Replacement beach picnic areas will be located around the perimeter of the lake in areas that could be accessed by boats. These picnic areas would have minimal improvements and consist of a level spot with sand for boaters to set up their picnic gear. The beach picnic areas will require a minimum area of 100 square feet, and should be irregular in shape to conform to the natural topography. The final locations for the beach picnic areas shall require additional site-specific review.

Fishing

Fishing is one of the most favored forms of recreational uses at San Vicente Reservoir. There have been numerous trophy-sized catches of largemouth bass and other species. Fishing will continue to be provided and enhanced after the construction of the proposed system. The master plan identifies three types of fishing opportunities for the San Vicente Reservoir.

- **Boat Fishing**

The primary means of fishing at San Vicente is from boats. This will be further enhanced with additional surface area provided by the construction of System 5 of the proposed Project.

- **Shore Fishing**

New shore fishing opportunities will be located at different areas along the perimeter of the reservoir (see Figure 6). Due to the steep topography that defines the majority of the reservoir, shore fishing will be limited. The shore fishing locations will be accessed primarily by trails and boats. The shoreline of these fishing locations shall not exceed a 4:1 ratio in slope.

- **Pier Fishing**

A new floating fishing pier will be provided at the floating boarding pier of proposed marina, which to which wheelchair accessibility will be provided. An additional fishing pier will be constructed in approximately the same location where the existing pier is located, north of the boat dock. This will be a floating pier to compensate for fluctuation of water elevation.

Restocking of the reservoir with fish may be required. This restocking would replace fish lost during the draw down of the reservoir to construct the dam. This restocking could be coordinated with the California Department of Fish and Game (CDFG) or the White Water Hatchery, which currently provides the SDWUD with fish. Also, for improving the future fishing habitat at the reservoir, it is recommended that the banks of the reservoir, which will be inundated, should remain intact and not be denuded of vegetation nor major boulders be removed. This will support a good habitat for future fish rookeries and the boulders are excellent cover for them.

Pathways

A new shoreline pathway would be constructed to link the marina area with the replacement fishing pier north of the boat dock. This pathway would be a maintenance vehicle access that would be shared with pedestrians, providing ample width to access the floating pier, or to proceed to the northwest, past the pier, to the shore fishing area. This pathway would be approximately ten to twelve feet wide and constructed of decomposed granite.

Phasing Recommendation

The marina will be the major recreation construction project for the San Vicente Reservoir. The boat launch ramp proposed at the new marina should be constructed prior to the refilling of the reservoir. This would permit the construction of a ramp that would be of sufficient length to access the reservoir when the water level has been lowered due to normal operations. The anticipated fluctuation range of the reservoir water level is approximately 100 feet, from the highest to lowest elevations.

Boat access is extremely important to the operation of the reservoir as a recreation facility. Without access to the reservoir, the number of boating days will be less, thus creating a loss in revenue. This loss of revenue can be kept to a minimum if the boat launch can be constructed to access the reservoir even at its lowest water level. The County Water Authority may provide temporary concrete mats to allow access to the reservoir at the lowest water levels, during a period of near completion of the dam construction

The remaining elements of the marina (parking lot, buildings, picnic areas, and park) could be constructed after the completion of the dam and the refilling of the reservoir.

The picnic beaches could also be constructed during the building of the new dam. The beaches would be constructed above the high water line or the 766 MSL foot contour interval. The sand for the beaches would be collected from on-site sediment. This sediment would be easier to obtain when the level of the water at the reservoir is lowered or drawn down during the construction of the dam.