The results suggest at least modest support for various potential commercial services from some respondents and stronger support from others.

3.2.3 Trends in Recreation Use

Population

Population growth is the key factor accounting for trends in recreation use. A 2005 State Parks planning document notes:[29] "changes in the size and composition of California's population, more than anything else, will drive the impacts on the delivery of park and recreation services in the coming years." California's increasing population of about 500,000 people annually will be the primary factor influencing future recreation use. Two other demographic factors (decreasing participation rates among young adults and youth and varying participation rates based on ethnicity or race) and their potential effect on commercial services are also important factors accounting for recreation use trends. Additional information on recreation trends was obtained from the 2009 California Outdoor Recreation Plan prepared by California State Parks.

The population in the primary market area served by New Melones Lake is expected to increase substantially in the future, which could result in increased demand for commercial services at the lake. Population projections for the New Melones Lake market area are presented in Table 3-5. These projections extend through 2040 and were estimated by using county population projections from the California Department of Finance and information on respondent's county of origin from the New Melones Lake on-site visitor survey. To develop a single set of population projections, county-level data for primary market area counties were aggregated and weighted based on the relative proportion visitation from each county. The population of the primary market area is expected to increase (relative to 2009 population levels) by 15.3 percent by 2020, 31.2 percent by 2030 and 47.9 percent by 2040; this equates to an annual population increase of about 1.2 percent over the approximate 30-year projection period.

[29] California State Parks. 2005. *Parks and Recreation Trends*

Table 3-5. Population Projections in the Primary Market Area Serving New Melones Lake

County	Proportion of Visitors	Population Projection			
		2009	2020	2030	2040
Tuolumne	20.1%	56,335	64,161	67,510	70,325
Santa Clara	11.5%	1,857,621	1,992,805	2,192,501	2,412,411
Stanislaus	10.1%	526,383	699,144	857,893	1,014,365
San Joaquin	9.1%	689,480	965,094	1,205,198	1,477,473
Calaveras	8.8%	45,987	56,318	64,572	72,230
Contra Costa	8.8%	1,060,435	1,237,544	1,422,840	1,609,257
Sacramento	5.9%	1,433,187	1,622,306	1,803,872	1,989,221
Alameda	5.4%	1,556,657	1,663,481	1,791,721	1,923,505
Total (Weighted)	**--**	**761,521**	**878,177**	**998,791**	**1,126,146**
Percent Change (from 2009)	**--**	**--**	**15.3%**	**31.2%**	**47.9%**

Source: California Department of Finance, 2007

Decrease in Participation among Youth and Young Adults

There are strong indications that youth and younger adults are not recreating at the same levels as previous generations did. This is especially true for "traditional" activities such as fishing and hunting. Given the popularity of fishing at New Melones Lake, the implication is that any increase in fishing activity will lag the rate of population growth. For example, participation rates have dropped among young adults from 34 percent in 2002 to 21 percent in 2007. Therefore, the increase in population is partially offset by a decrease in the proportion of Californians who participate in fishing.

Differing Participation Rates among Ethnic and Racial Groups

Another important factor relating to recreation use is lower recreation participation among minority ethnic and racial groups than among whites (Manning 1999). Because the population of non-whites is expected to increase at a greater rate than whites in California, recreation use may not increase as rapidly as population growth, other factors equal.

Activity Participation

Cordell et al. (1999) provided the most comprehensive recent regional projections for several important recreation activities. Projections were made through 2050 and were based, in part, on projected population changes. The country was divided into five regions. New Melones Lake and the primary Lake market area are in the Pacific Coast region. The following are participation rate projections from 2010 to 2050 for important recreational activities for that region:

- Motor boating (increase 54%)

- Non-pool swimming (increase 45%)
- Rafting / floating (increase 64%)
- Fishing (increase 23%)
- Horseback riding (increase 50%)
- Developed camping (increase 45%)
- Picnicking (increase 36%)

Most activities were projected to increase through 2050. Fishing was anticipated to increase more modestly in spite of a substantial increase in population in the Pacific Coast region. The authors acknowledge the impact that unexpected changes in the national and regional economy will have on projected recreation use. The projections thus provide general guidelines on the direction of recreation use, but are not a substitute for on-site monitoring of recreation use. Cordell (2008) followed up the 1999 report by tracking nature-based outdoor recreation participation at a national level from 2000 through 2007. Data suggest a modest 3.1 percent increase in the numbers of people who participated in nature-based outdoor recreation. However, the number of activity-days increased more substantially, indicating that people are spending more time on individual trips or that some visitors are participating very frequently. This is the case at New Melones Lake, as the on-site recreation survey indicated about one-quarter of the respondents had visited more than 16 times in the past 12 months.

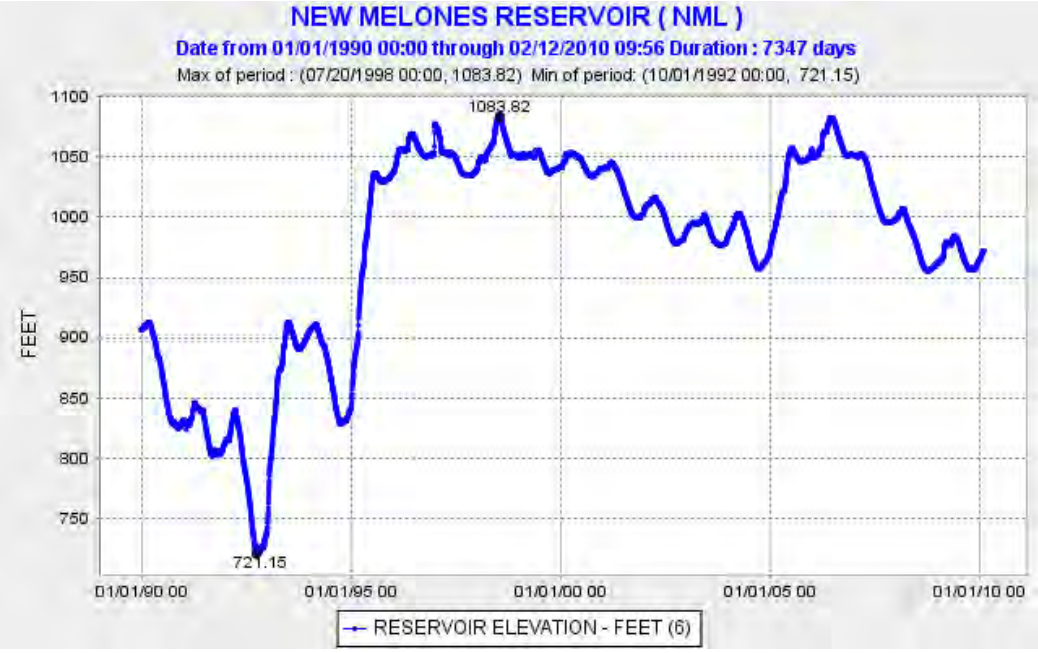
There are indications that recreation use (especially traditional activities such as fishing) may not be increasing at the level Cordell and others projected in 1999. The California Department of Fish and Game (2009) reports the number of sport fishing licenses sold by year from 2000-2008. Over that period, the total number of sport fishing licenses sold in California decreased from about 3.1 million to about 2.9 million despite the growth in population over that same period.

3.2.4 Other Factors Influencing Recreation Demand

Reservoir Water Levels

As a multi-purpose facility, management of water supplies at New Melones Lake results in fluctuations in water levels in the reservoir. Water levels vary seasonally because of reservoir drawdown and also vary annually due to wet and dry weather cycles. One of the primary effects of water level fluctuation is the impact upon recreation, which can result in changes in visitation levels and corresponding demand for commercial services. New Melones Lake may be more desirable for some visitors at full pool as there is more boatable area and the lake appears more attractive. However, some parking facilities are inaccessible at higher levels, thereby limited accessibility and use. Low water levels decrease boatable areas (although there could be an increase the

availability of whitewater recreation) and may make the lake less desirable for some potential visitors. In addition, Haas (2003) suggests that the amount of islands and coves and inlets available for house boaters to obtain privacy increases at low water levels. In any case, commercial services fully reliant on either high or low water levels may be compromised with substantial fluctuations in water levels. This is particularly important at New Melones Lake, for which current operating rules and agreements are undergoing review and may result in greater drawdown of the reservoir at certain times of the year. To provide perspective, Figure 3-3 shows changes in water surface elevation at New Melones Lake since 1990. Between 1990 and 2009, water levels have fluctuated between 721 feet and 1,084 feet, and have only approached full pool fewer than half of the years. In addition, recent rulings and decisions from court cases and the US Fish and Wildlife Service may result in a long term trend of lower average water levels.



Source: California Data Exchange Center, 2010

Figure 3-3. Water Elevations at New Melones Lake (1990-2009)

Fuel Prices

Fuel prices have increased for several years because of the increasing worldwide demand, a weakening US dollar, and, likely, other factors. Cordell (2008) suggests continuing high fuel prices would likely increase recreation demand at natural areas proximate to urban areas while reducing demand at more distant locations. New Melones Lake is close to urban areas in both the

Bay Area and Central Valley. Therefore, it is not certain that increasing fuel prices will result in a subsequent decrease in recreation visitation. However, a significant increase in fuel prices could have an effect on fuel-intensive recreation activities (such as motor boating) as the cost of both travel and participation increases.

3.2.5 Conclusions Regarding Recreation Demand

Overall, it is anticipated that recreation use at New Melones Lake will increase over time, but likely less than the rate of population growth due to recent trends that indicate a decline in recreation participation, as well as other demographic and economic factors. A key confounding factor is the possibility that people that recreate at New Melones Lake will do so more frequently as indicated by national trends. As a result, it is difficult to predict the rate of change in recreation use; therefore, the estimated population growth rate (1.2 percent in the regions where visitors reside) is considered an upper bound on forecasted recreation use at the lake.

The anticipated increase in recreation use suggests that occupant capacity could continue to be reached on summer weekends. However, this is not expected to be an issue during other times of the year.

Chapter 4
Review of Commercial Service Opportunities

In Chapter 4, a range of potential commercial service opportunities at New Melones Lake are assessed in accordance with key evaluation criteria relevant to the commercial service planning process (Section 4.1). Potential commercial opportunities considered in this study were identified based on information from the RMP and/or are commercial services frequently provided at other Reclamation facilities. Commercial services are analyzed individually; however, multiple services may be combined to enhance their viability. Many of the potential commercial services addressed in Section 4.2 are consistent with Reclamation goals and objectives; however, the analysis also addresses other potential commercial services that have been identified in the RMP process, but which are explicitly prohibited under the preferred alternative in the RMP.

The siting of commercial services under consideration is addressed generally in this chapter in Section 4.3. A more detailed discussion of resource-based opportunities and constraints and engineering considerations is presented in Chapter 5. The financial feasibility evaluation for select commercial services is presented in Chapter 7.

4.1 Criteria for Evaluation

Three general criteria were used to assess the various potential commercial service opportunities at New Melones Lake. These criteria address whether an adequate market exists (i.e., supply and demand) for each commercial service, as well as the overall appropriateness of the commercial service at the lake. More detail on these criteria is presented below.

- Demand[30]
  - Is the commercial service necessary to meet existing and potential future recreational demand?
  - Do population and recreation trends suggest that there will be a future demand for the commercial service?
- Supply
  - Is demand met on or off of the federal estate? (Opportunities both on and off the federal estate may meet existing demand.)
  - Would the provision of the commercial service at New Melones Lake be unique? (For example, food services are available in

[30] For this CSS, demand was assessed qualitatively using a range of indicators, including population growth and trends in activity participation.

Sonora and Angels Camp, but food service on the lake would provide a different experience).

- Does the supply of comparable commercial services take into account local opportunities, while accounting for the utility of the reservoir?

- Appropriateness of Facilities and Services
  - Is the commercial service consistent with Reclamation's goals and policies?
  - Is the commercial service consistent with the New Melones Lake RMP/EIS (preferred alternative)?
  - Is the commercial service best provided as a public service and not as a commercial service? (Demand may exist for some services, which have been traditionally provided as a public service, e.g. campgrounds, picnic areas, and boat ramps, while others, including marinas, have been traditionally provided by commercial operators).

4.2 Commercial Service Opportunities Subject to Evaluation

The following includes a discussion of the various potential commercial activities and an assessment of their viability and appropriateness at New Melones Lake. Each section includes a note regarding the recommendation for whether the service considered should be included in the financial feasibility evaluation. As indicated above, some of these services may not be viable on their own and may need to be combined with other activities into an integrated operation.

4.2.1 Marina Services: Berths and Moorings

Generally, the demand for motor boats and related marina services is likely to continue into the future.[31] Marina berths and moorings provide boat owners with storage facilities on the water, allowing them to easily access their craft without loading and unloading them. This ease of access is especially important for operators of large boats, including houseboats. Many large lakes and reservoirs in California that experience high boating activity generally provide opportunities for berth and/or mooring rentals on both a short- and long-term basis.

At New Melones Lake, current demand for marina berths and moorings exceeds available supply at existing marina facilities as demonstrated by the multi-year waiting list that is maintained for long-term berth rentals accommodating both

[31] Cordell 1999

small watercraft and larger houseboats.[32] The waiting lists indicate that boat owners would readily rent additional berths if they were available.

Currently, the marina does not provide transient slip rentals, and there is currently no efficient way to store boats for transient or short-term visitors to the marina. There appears to be an unmet demand for these services, as boat owners would likely prefer to store their boat on the water during their stay rather than to pull the boat off the water every day. Haas (2003) suggested that providing transient slips would also alleviate congestion on the boat ramps by reducing the number of times visitors load and unload their boat, particularly on summer weekends.

Although it is evident that marina operations could expand based on existing demand, the capacity of the lake and related resource considerations must be considered. In the 2003 visitor capacity study, Haas concluded that one marina was adequate to serve visitors at the New Melones Lake. A single marina would offer consolidated services and may minimize resource impacts. An additional marina could potentially be supported if the number of slips and mooring opportunities is expanded. The decision to expand the capacity of marina facilities should be made in conjunction with new information on the carrying capacity of the lake.

There has been consideration of an additional marina facility offering less intensive recreation opportunities, such as kayak and canoe rentals, thereby serving a different type of recreation user. Because such a facility would likely need to be located in a less-developed part of the lake, it could create an inconsistency with WROS guidelines. Further, such a facility may not have a large enough customer base to be economically viable; many non-motorized boaters may prefer to visit lakes and reservoirs that are higher in elevation, and more than likely, at a location that does not allow or limits motorized craft. As a result, a single consolidated marina that caters to a diverse range of recreational users and activities is proposed.

There are several key issues related to marina facilities that need to be addressed to better provide short- and long-term berthing at the lake and enhance overall marina operations: (1) location of the marina(s); (2) boundary issues; (3) and concerns regarding exclusive use. Because of the current location of the marina, boats and existing facilities are susceptible to damage from prevailing storm winds from the southwest, which build energy before lapping waves up against marina facilities. In fact, there have been several large storms in recent history that have caused substantial damages to the marina and boats. As a result, it is recommended that the marina be relocated to a more suitable location, but it should be retained in one of the existing developed recreation areas – Glory Hole or Tuttletown. Based on a planning-level analysis, potentially suitable locations include the Black Bart Day-Use Area (at Glory

[32] Personal communication with Mike Han, 2009

Hole) or the Heron Point Day-Use Area (at Tuttletown). However, it is recommended that a more in-depth analysis of marina location be conducted to identify optimal locations for marina facilities. Additional studies need to take into account site-specific characteristics, such climatic conditions (e.g., wind patterns), water level fluctuations, and natural and cultural resources.

As for marina boundaries, it is acknowledged that water level fluctuations can cause the existing marina to extend outside its fixed boundary. It is recommended that any new concession contract allow flexibility in the marina boundary by allowing the boundary to adjust to different lake elevations.

The last planning issue associated with marina facilities is related to exclusive use. Existing practice at New Melones Lake is to allow boat owners to store their watercraft indefinitely at marina facilities, a potential conflict with Reclamation Directives and Standards regarding exclusive use. This issue will be addressed in a formal houseboat policy currently being developed by Reclamation.

- ***Conclusion: It is recommended that the provision of marina berths and moorings be included as part of future commercial services at New Melones Lake pending financial feasibility evaluation and resource considerations. Additional marina capacity should be considered in the context of the carrying capacity of the lake. All marina services should be provided as part of a single consolidated marina operation.***

4.2.2 Marina Services: Dry Boat Storage

Dry boat storage would allow boat owners to store their craft off the water, but still within the boundaries of Reclamation-managed lands. Options for dry boat storage include covered facilities that offer weather protection or uncovered storage yards. With dry boat storage, boats can be stacked on racks, allowing accommodation of considerable watercraft given space constraints. These facilities can be covered or uncovered, but are typically used in water bodies that are not subject to water level fluctuations. Currently, no dry storage is provided on Reclamation lands at New Melones Lake. However, there are private commercial operations near New Melones Lake that do provide opportunities for boat owners to store their boats, indicating an underlying demand for this service. These businesses include self-storage facilities that can provide covered and uncovered storage spaces; several facilities are located in the immediate vicinity of New Melones Lake, including one directly across the street from the Glory Hole access road. Another storage facility catering to boat and RV owners is located at the entrance road to the Tuttletown Recreation area.

Even with these nearby facilities, storing a boat near the lake and marina facilities on Reclamation-managed lands may provide added convenience to some boat owners. In addition, the demand for dry boat storage services may

increase if it is determined that the marina should only be operated on a seasonal basis. Given the relatively large percentage of visitors who come from the Bay Area, it is likely that some visitors would wish to keep their boat on-site and not haul their boat back and forth across this distance. Another consideration is potential boat quarantine restrictions related to quagga mussels. Under such quarantine, boat owners could avoid repeated inspections by leaving their vessels at an on-site storage facility, which would increase the demand for dry boat storage. There may also be opportunities for the concessionaire to provide decontamination services to boat owners. Based on locally-available storage opportunities, proposed dry boat storage would need to be simple in scale to compete economically with private commercial operations. It is recommended that dry boat storage be provided at an uncovered storage yard, which would require minimal capital investment and be offered in conjunction with existing or future marina services.

- ***Conclusion: It is recommended that the provision of dry boat storage be included as part of future commercial services at New Melones Lake pending financial feasibility evaluation and resource considerations. All marina services should be provided as part of a single consolidated marina operation.***

4.2.3 Marina Services: Boat Repair

An existing boat repair facility is located near the New Melones Lake Marina consisting of a small repair building within the marina storage yard. This facility allows boat owners to have their watercraft repaired while at the lake or between visits, which offers advantages relative to other repair facilities in the region. There is a clear demand for this type of service at the lake based on the existing demand for repairs performed at the current facility. Existing and future demand is supported by the large number of boat owners who recreate on the lake. Boat repair services should be provided by trained staff only and that do-it-yourself boat repairs not be allowed. To economize on investments in new facilities, the boat repair operation could be combined with dry boat storage and other potential marina services.

- ***Conclusion: It is recommended that the provision of boat repair services be included as part of future commercial services at New Melones Lake pending financial feasibility evaluation and resource considerations. All marina services should be provided as part of a single consolidated marina operation.***

4.2.4 Marina Services: Motorized Watercraft Rentals

Motorized watercraft includes ski boats, wakeboarding boats, pontoon boats, houseboats, and fishing boats, all of which are permitted at New Melones Lake. Motorized watercraft rentals are currently provided at the existing marina. At the national level, it is anticipated that there will continue to be demand for

motorized boating.[33] Given the popularity of boating at New Melones Lake, future demand for rentals is likely to increase.

At New Melones Lake, expanded types of boat rentals could be incorporated with marina services. Such rentals typically provide the core services for a marina, and it is unlikely that these facilities could be successful without such rentals. Future demand for motorized rentals is likely to continue given existing demand and the appropriateness of boating at New Melones Lake. Motorized watercraft rentals should continue to be provided in conjunction with a marina.

- ***Conclusion: It is recommended that motorized watercraft rentals be included as part of future commercial services at New Melones Lake pending financial feasibility evaluation and resource considerations. All marina services should be provided as part of a single consolidated marina operation.***

4.2.5 Marina Services: Non-Motorized Watercraft Rentals

Non-motorized watercraft rentals include flat-water kayaks, canoes, and paddleboats. The existing marina rented kayaks at one time but the demand was very low.[34] Most of the boating activity at New Melones Lake is motorized, and some kayakers may prefer to boat in quieter locations such as higher elevations in the Sierras, where there are fewer motorized craft, or to sea kayak on the San Francisco Bay or in the ocean, for example. Further, many individuals who kayak or canoe own their craft as the cost of ownership is much cheaper than most motorized boats. Cordell (2008) cites kayaking as "fast growing;" however, it is unclear that flat-water non-motorized boating represents a significant commercial stand-alone opportunity at New Melones Lake. Therefore, non-motorized watercraft rentals could be authorized at a marina, but not necessarily required as a concession.

- ***Conclusion: It is not recommended that the provision of non-motorized watercraft rentals be included as a stand-alone operation. It is recommended that non-motorized watercraft rentals be considered as an authorized use in conjunction with proposed marina facilities.***

4.2.6 Food and Drink Service

Currently, New Melones Lake has no prepared food or drink service. The existing marina store provides packaged foods, such as sandwiches and snacks. Food and drink service options could include a grill or snack bar, possibly with outdoor seating, and could serve beer or wine. The restaurant facility could take advantage of its location on the lake, which would provide a unique dining experience.

[33] Cordell, 1999
[34] Han, 2009

It should be noted that many food and drink options are available in the area, specifically in Angels Camp or Sonora. However, these establishments do not provide the unique amenities that the lake provides, such as accessibility and lake views. A grill could be built on shore or floating on the lake, most likely associated with a marina. A facility along the shore may not be viable because of periodic drawdowns of the lake. A facility along the shore at full pool could be considerably less accessible as the water level drops. Therefore, a food and drink service would be better located on, rather than off, the water.

- ***Conclusion: It is recommended that the provision of food and drink service be included pending financial feasibility evaluation and resource considerations. It is recommended that the outdoor grill should be incorporated as part of a full-service marina.***

4.2.7 Recreation Supply and Convenience Store

A recreation supply and convenience store would sell such items as fishing tackle, firewood, wakeboards, life jackets, and camping supplies, and basic food provisions. This type of store could also rent outdoor recreation equipment, such as mountain or road bikes. Currently, many of these items are available at the existing marina store. However, access to the marina is difficult when the water is low because parking is distant from marina facilities. Further, many fishing, camping, and other supplies are readily available in the communities surrounding New Melones Lake, including a full-service supply store near the entrance to the Glory Hole Recreation Area. Therefore, it is unclear that a stand-alone supply store is necessary, even given the demand from campers and boaters at the Glory Hole and Tuttletown Recreation Areas. It is more likely that the demand for recreation supplies would be better met at facilities operating in conjunction with another commercial service at the lake, such as a marina or RV Park.

- ***Conclusion: It is recommended that the provision of recreation supplies be included pending financial feasibility evaluation and resource considerations. Such a facility should be provided as part of another commercial facility, such as the marina or RV Park.***

4.2.8 Lake Tours and Cruises

Lake tours and cruises would provide visitors with interpretive or dinner tours around New Melones Lake. The tours would likely be operated from a marina. While some demand for lake cruises is likely, it is not likely to be extensive. Cruises on San Francisco Bay and Lake Tahoe offer significant competition and challenges for a potential tour operator at New Melones Lake. Low water levels during drought years would further challenge an operator, as the access to scenic coves is reduced and the exposed shoreline is not as aesthetically appealing as at full pool. It is not expected that a lake tour and/or cruise concession would be successful as a stand-alone operation. However, it could be considered as an authorized service provided in conjunction with a marina, which could partner with local vendors (such as wineries) to provide periodic cruises.

- ***Conclusion: It is not recommended that the provision of lake tours and cruises be included as a stand-alone commercial operation. It is recommended that lake tours and cruises be considered an authorized use in conjunction with proposed marina facilities.***

4.2.9 RV Park

An RV park would provide spaces for RV camping and associated services such as hook-ups. Currently, there are no hook-ups at New Melones Lake; however, the region has several RV parks, including one park opposite the road leading to the Glory Hole Recreation Area. There are some areas near Tuttletown that have previously been identified as potential locations for an RV park, and which would provide preferable access to the reservoir. Currently, California State Parks (2005) suggests that as baby boomers reach retirement, RV ownership and hence the demand for these services will increase to record levels. An RV park could also potentially provide an opportunity for a recreation supply store to be included. An RV park would have to be constructed outside of the lake's Rural Natural Management Area.

- ***Conclusion: It is recommended that the provision of an RV Park be included as a new commercial service pending financial feasibility evaluation and resource considerations.***

4.2.10 Lodging

For the purposes of this report, lodging includes cabins, yurts, motels, and hotels. Currently, land-based lodging is not available at New Melones Lake; however, lodging is available by houseboat. Land-based lodging would be affected by reservoir drawdown. Also, numerous hotels and motels are in the vicinity of New Melones Lake, especially in Sonora and Angels Camp. The Sonora Chamber of Commerce lists six lodging options on their website in Sonora; other lodging options are available throughout Calaveras and Tuolumne counties.

- ***Conclusion: It is not recommended that the provision of overnight lodging facilities be considered for a commercial service at New Melones Lake.***

4.2.11 Horseback Riding Stables

Commercial horse stables can provide a number of services, including horse boarding, riding rentals, and guided interpretive trips. Boarding services would cater to existing horse owners that seek to maintain their horses near the area where they typically recreate. Riding rentals and interpretive rides are typically provided for introductory riders, including families with children. There are several commercial equestrian operations in proximity to New Melones Lake, including public facilities in Copperopolis, Murphys, and Groveland. These operations offer trail rides and some provide opportunities for horse boarding. In addition, one of these facilities is located at Pine Mountain Lake, a much smaller reservoir southeast of New Melones Lake.

Despite other horse stables in the region, New Melones Lake offers a unique opportunity for equestrian-related services at a large water body, distinguished by lake views and opportunities to integrate other recreation activities at or near the lake with the riding experience. Such a facility could be incorporated into the proposed equestrian staging area planned at the Peoria WMA. The level of development for a horseback riding stable could range from a multi-purpose facility providing riding rentals and boarding with a permanent barn structure, or it could be a less-developed facility with portable corrals operating on a seasonal basis. Further evidence of local demand is found in the visitor survey, where horseback riding was a commonly cited activity that visitors would participate in if it were available. Given the apparent latent demand and the construction of a new equestrian facility, commercial equestrian services at New Melones Lake may be warranted.

- ***Conclusion: It is recommended that the provision of a horseback riding stable be included as a new commercial service pending financial feasibility evaluation and resource considerations.***

4.2.12 Adventure Outfitter Guide Services

Adventure outfitter guide services may include rock climbing instruction, kayak instruction, and spelunking-related activities. It could also include a formal outdoor adventure school. In general, outfitting services cater to newcomers because moderate to highly experienced climbers or other participants frequently own their gear (or borrow from friends).

Introductory guide services are provided throughout Northern California in urban areas (e.g., at climbing walls, regional parks, and on San Francisco Bay), at or near ski resorts (e.g., Bear Valley and Northstar), and at National Parks (e.g., climbing school at Yosemite). It is expected that outfitters at New Melones Lake would be challenged, given the world class opportunities throughout Northern California. The New Melones Lake could potentially provide a location for an existing outfitter to provide introductory kayaking classes, but would likely not be a successful location for a permanent facility. Commercial opportunities (such as Moaning Caverns) abound in the adjacent counties, and it does not appear necessary to provide more opportunities at New Melones Lake.

- ***Conclusion: It is not recommended that the provision of adventure outfitter guide services be considered for a commercial service at New Melones Lake.***

4.2.13 Event Venue

An event venue (not a campground amphitheater) would provide an opportunity for live events (theater or music) or possibly weddings. Currently, this type of facility is not available at New Melones Lake. However, many venues are available in the surrounding area, some associated with local wineries (such as Ironstone Vineyards). Further, there is potential for land use conflicts due to noise, which may be detrimental to nearby recreation uses such as camping.

- ***Conclusion: It is not recommended that an event venue be considered for a commercial service at New Melones Lake.***

4.2.14 Mountain Bike Course or Park

A mountain bike park would provide trails for mountain bikers. Individuals would pay a fee to ride the course, which could potentially be used for races or other special events. The Sierra Nevada mountains and foothills provide extensive opportunities for mountain biking. Further, Cordell (2008) noted that mountain biking participation has dropped substantially from earlier this past decade. It is unclear whether demand for mountain bike courses would be adequate to support a commercial operation at New Melones Lake.

- ***Conclusion: It is not recommended that a mountain bike course or park be considered for a commercial service at New Melones Lake.***

4.2.15 Whitewater Rafting (Guided)

Whitewater rafting is possible in the New Melones Lake planning area when lake levels are low, during which times boaters can raft or kayak the Stanislaus River (near Camp Nine). Cassady and Calhoun (1995) describe the Camp Nine run as follows: "…whenever the reservoir is low enough to expose 5 or 6 miles of the river or more, some boaters will include Camp Nine on their itinerary…" (p. 79). The authors suggest it is a worthwhile run, a Class II-III run when the river is relatively low, but is sought by expert boaters during the spring melt. In fact, the river was run commercially in the early 1990s when the reservoir level was low for several years.[35] The boating run could potentially be extended upstream if a low head dam were to be removed. Commercial operators cannot count on the availability of this stretch of river every year because high water levels inundate the area.

Further, it is unclear where commercial rafters would disembark and take-out. One option would be for commercial boaters to transfer from rafts to flat water kayaks when they reach the reservoir. Another option would be for commercial operators to tow the rafters to a boat ramp. However, interested whitewater outfitting companies could provide commercial access for the public by special use permit and with the understanding that the stretch can only be run during dry years.

- ***Conclusion: It is recommended that Reclamation provide opportunity for commercial operators to obtain special use permits to provide whitewater rafting given appropriate reservoir conditions.***

4.2.16 Fishing Guide Services

Fish guiding services could include local outfitters who lead clients on the lake (either in an outfitting boat, but possibly in a client's boat) to fish. Presumably, the outfitter would be a specialist in a fishing technique and/or would be

[35] Personal communication, Tyler Wendt, OARS, March 8, 2010

knowledgeable about places to fish at the lake. Similar to whitewater boating, managing fishing outfitters and guide services may best be managed by special use permit.

- ***Conclusion: It is recommended that Reclamation provide the opportunity for commercial operators to obtain special use permits to provide fishing guide services at New Melones Lake.***

4.2.17 Seaplane School

A seaplane school would teach students how to fly a seaplane and use New Melones Lake as an area to practice landing and taking-off. It is difficult to determine if there is demand for such a service. However, an operating seaplane school would be inconsistent with the preferred alternative of the recently released RMP.

- ***Conclusion: A seaplane school is inconsistent with the RMP and is not recommended as a commercial service at New Melones Lake.***

4.2.18 OHV Course

An Off-highway vehicle (OHV) course would allow OHV enthusiasts to drive their vehicles in a somewhat controlled setting while certain challenges can be set up. There are many OHV trails available in the Sierra Nevada, especially on forest service lands. However, the operation of an OHV-course would be inconsistent with the preferred alternative of the recently released RMP.

- ***Conclusion: An OHV course is inconsistent with the RMP and is not recommended as a commercial service at New Melones Lake.***

4.2.19 Skeet & Target Shooting

Skeet or target shooting consists of visitors practicing shooting guns in a generally controlled setting. However, it is not recommended that this activity be provided as a commercial service because it would be inconsistent with the preferred alternative of the recently released RMP.

- ***Conclusion: Skeet and target shooting are inconsistent with the RMP and are not recommended as a commercial service at New Melones Lake.***

4.2.20 Summary of Commercial Service Opportunities

Table 4-1 summarizes the recommendations for the commercial services discussed above. The recommendations presented here are preliminary, as Reclamation may at a later date determine a commercial service is no longer necessary or that a service would be better provided, for example, through a special use permit rather than a concession agreement.

Table 4-1. Summary of Commercial Services and Recommendation

Service	Recommendation			
	Required Concession (Pending Financial Feasibility)	Authorized Activity (Not Considered in Financial Feasibility)	Considered Under Special Use Permit	Not Recommended or Allowed
Marina Berths and Moorings	X			
Dry Boat Storage	X			
Boat Repair	X			
Motorized Watercraft Rentals	X			
Non-Motorized Watercraft Rentals		X		
Recreation Supply Store	X			
Food and Drink Service	X			
Lake Tours and Cruises		X		
RV Park	X			
Lodging				X
Horseback Riding Stables	X			
Adventure Outfitter Guide Services				X
Event Venue				X
Mountain Bike Course or Park				X
Whitewater Rafting			X	
Fishing Guide Services			X	
Seaplane School				X
OHV Course				X
Skeet & Target Shooting				X

4.3 Location of Potential Commercial Services

Generally, the recommended location of many of the aforementioned commercial services would be in or around the existing developed areas, specifically the Glory Hole and Tuttletown Recreation Areas. Specifically, the recommended placement of new marina facilities is at a new location within the Glory Hole Recreation Area. The major issue with the location of the existing marina, as discussed in Section 4.2.1, is the tendency for it to be damaged due to waves and wind associated with strong storms. A subsequent marina siting study was undertaken to identify the preferred location of a new marina (Bureau of Reclamation, 2011). The recommended location of the proposed RV Park is along the entrance road at the Tuttletown Recreation Area, as originally planned

in the 1976 Master Plan. The proposed equestrian riding stable is recommended to be located within the Peoria WMA to capitalize on integration with the proposed equestrian staging area planned there.

It is recommended that most of the services should be co-located for several reasons. First, all marina-related services should logically be developed together. In addition, other potential services, such as food and beverage service and the recreation supply store, would benefit from being combined with marina facilities to maximize sales and realize some economies of scale.

To facilitate siting of proposed commercial services, Chapter 5 includes a GIS-based recreation suitability analysis of the areas within the New Melones planning area (above full pool). The analysis considers various resource constraints to recreation development.

Chapter 5
Resource Opportunities and Constraints

5.1 GIS-Based Site Selection Analysis

A geographic information system (GIS) based analysis was conducted with an objective to determine sites potentially suitable for recreation development while considering potential resource constraints. The analysis uses existing data to classify the New Melones Lake planning area into three suitability categories: (1) high; (2) moderate; and (3) low. A final determination about suitability is not possible through this analysis for a few reasons. Information about the location of cultural resources is confidential and thus not included on the maps. Further, the maps are completed at a planning level scale and may not account for smaller-scale factors such as dense tree canopy or rock outcroppings. The site suitability maps are suggestive of places where recreation development may be possible; although, a comprehensive site survey would be necessary to confirm this.

5.2 Resource Opportunities and Constraints

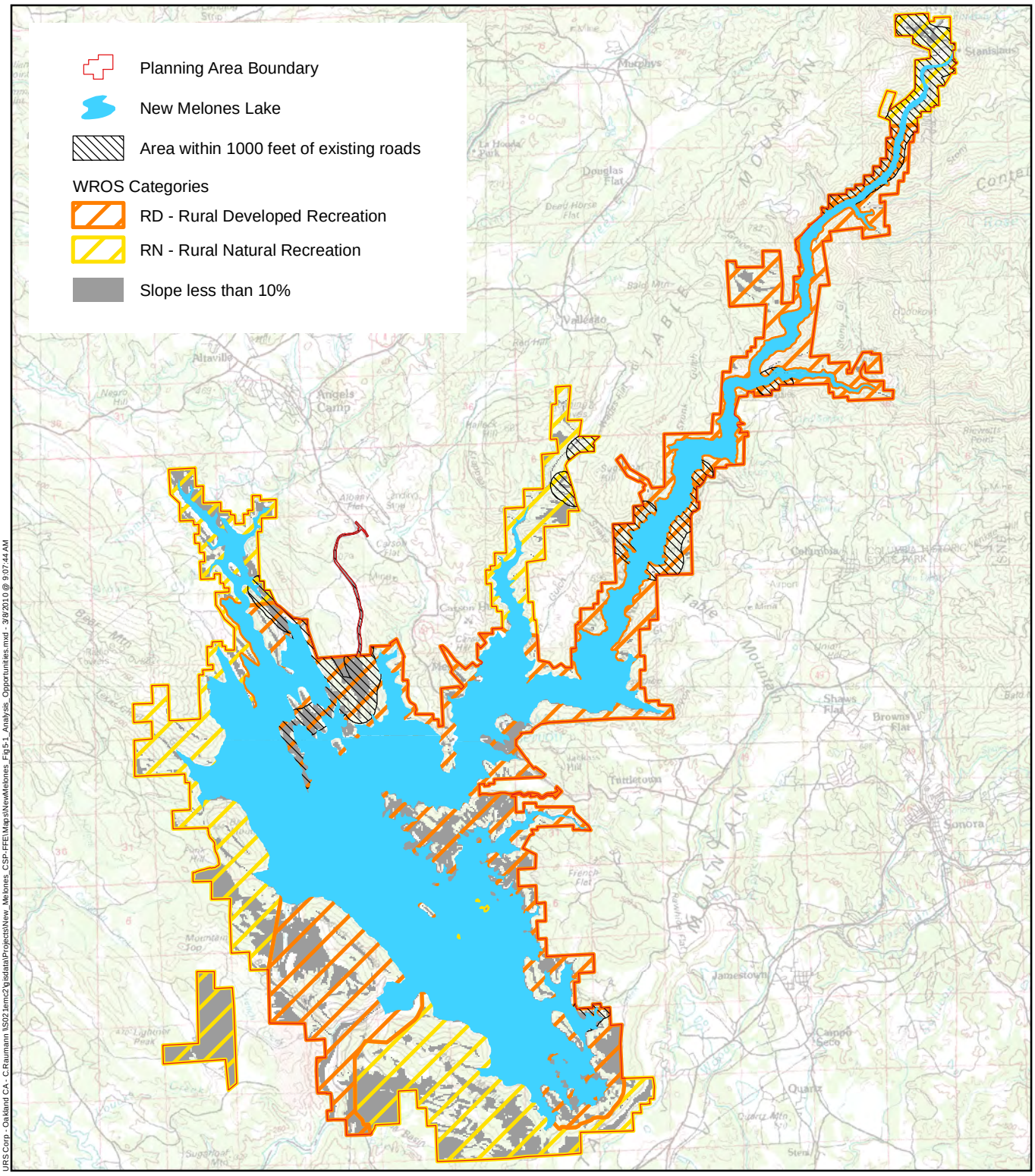
The analysis was completed by first mapping opportunities and constraints based on existing data. Opportunities are factors favorable to the development of recreation facilities; constraints are factors not favorable to development. Opportunities are shown on Figure 5-1 and constraints are shown on Figure 5-2. The analysis was limited to lands within the New Melones Lake planning area boundary.

Opportunities considered in this analysis include the following:

- Areas within 1,000 feet of existing roads
- Rural Developed and Rural Natural areas in the WROS classification system
- Areas with slope of less than 10 percent

Constraints considered in this analysis include the following:

- Semi Primitive areas in the WROS classification system
- Areas with slope of greater than 10 percent
- Areas on or below the dam

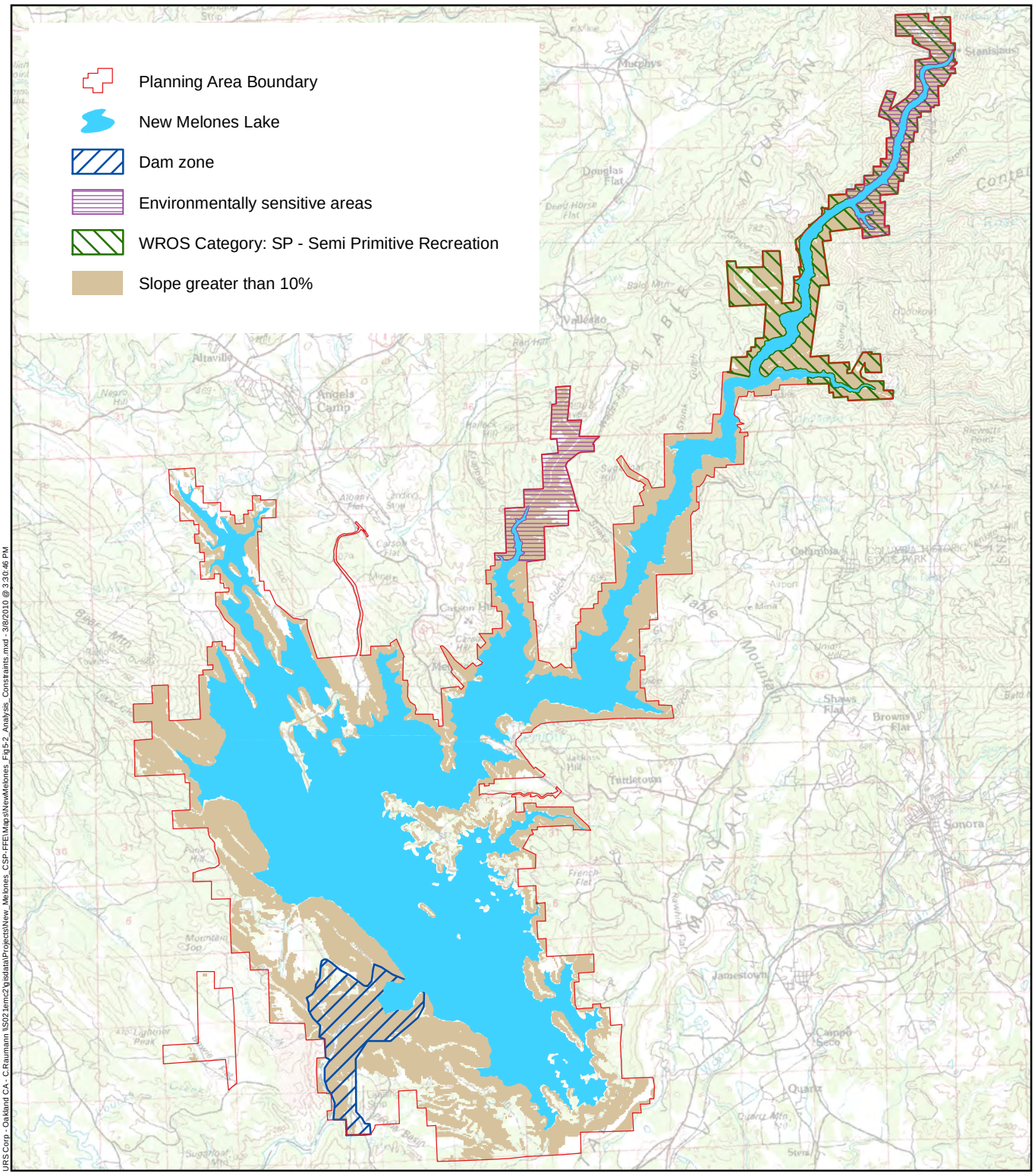


URS Corp - Oakland CA - C:\Raumann \\S02 1aemc2\gisdata\Projects\New_Melones_CSP-FFEIMaps\NewMelones_Fig5-1_Analysis_Opportunities.mxd - 3/8/2010 @ 9:07:44 AM

Opportunities in Site Selection Analysis

New Melones Lake Area, California
Central California Area Office

Figure 5-1



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Constraints in Site Selection Analysis

New Melones Lake Area, California
Central California Area Office

Figure 5-2

- Environmentally sensitive areas (Environmentally sensitive areas, determined from the RMP, may include caves, aquatic spawning habitat, riparian habitat, raptor nesting areas, cultural sites, and other vulnerable habitats.)

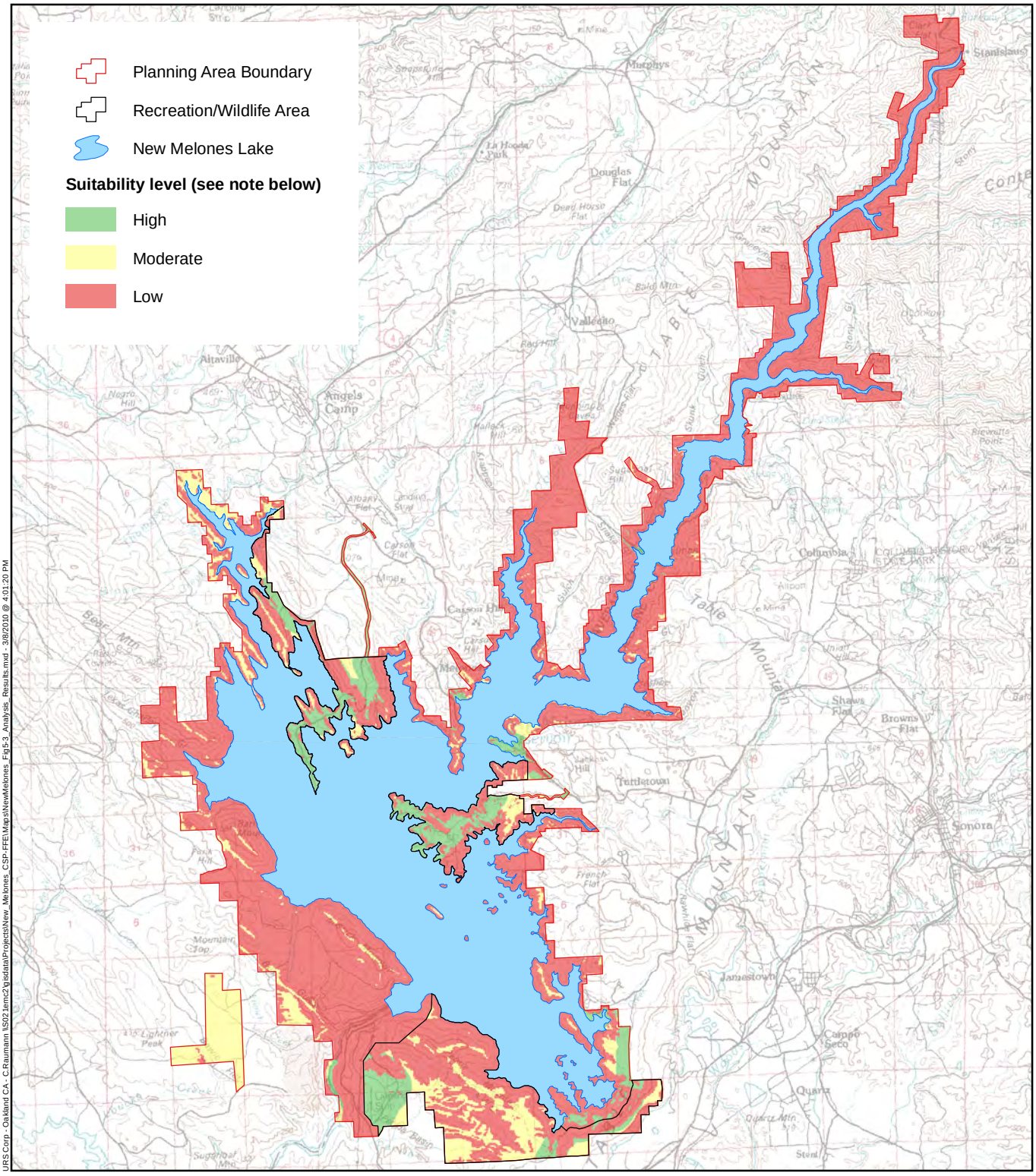
5.3 Site Suitability

Recreation opportunities and constraints were combined to classify the planning area into three suitability levels: High Suitability; Moderate Suitability; and Low Suitability.

The following decision criteria were used to classify the planning area into the three categories:

- An area that has one or more constraints is classified as "Low"
- An area that does not have any "low suitability" attributes and is within 1,000 feet of an existing road is classified "High"
- All other areas are classified as "Moderate"

Figure 5-3 shows the results of the site selection analysis on composite maps. Much of the study area is classified as "Low Suitability" mostly due to areas with slopes greater than ten percent. Limited areas are classified as "High Suitability" including areas primarily near both Tuttletown and Glory Hole Recreation Areas. Other areas with high suitability include areas at the south end of the planning area. Although, some areas are shown as high suitability, final verification is necessary with a site survey considering other characteristics such as cultural resources (which are confidential).



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Note: Results presented are from a planning-level analysis; final determination about the suitability of an area for recreation development would require a site-level analysis and consideration of potential cultural and biological resources.

Results of Site Selection Analysis

New Melones Lake Area, California
Central California Area Office

Figure 5-3

Chapter 6
Engineering Review

Chapter 6 presents a review of the conditions of existing marina and the estimated costs to remediate marina facilities at New Melones Lake. A field condition assessment was performed for the existing marina and was used to prepare cost estimates addressing the replacement of unusable components determined to have a remaining useful life of five years or less, and the cost of relocating useable components to another, more sheltered location on the lake. The cost to replace unusable components would be the approximate cost to refurbish the marina in its present location to begin another concession lease period. The replacement cost for unusable components added to the cost to relocate useable facilities would be the approximate cost for a marina at a different location on the lake to begin another concession period. The complete technical memorandum is included as Appendix B.

6.1 Field Condition Assessment

The scope of the review included the floating components of the marina and the land-based infrastructure directly supporting the floating components.[36] A field visit was conducted that covered on-shore facilities and a boat tour of floating facilities.

Based upon information shown on the New Melones Lake Marina Long Term Development Plans, there are two configurations for the marina, a winter layout and a summer layout. According to the concessionaire, the winter layout is necessary due to the high wave action and potential for damage during the inclement weather months. The marina layout observed during the field visit was the winter layout. Referenced drawings are included in Appendix B.

The field study included a review of conditions of the marina, including estimated remaining service lives and costs to replace key facilities. The current marina concessionaire indicated that the useful life for both existing and future marina infrastructure is affected closely by the severity of winter storm damage due to wind and large waves. The current marina location is not adequately protected by either a land mass or wave attenuation of some sort to mitigate the damage to the docks or floating structures.

Table 6-1 summarizes the major marina components observed during the site visit and provides the estimated remaining useful life that would be expected in a protected location. Protection could be provided by relocating the marina to a

[36] Other land-based buildings and infrastructure (e.g., pavement, lighting, etc.) will be assessed separately.

more sheltered cove or providing suitable wave attenuators. Without either action, the useful life estimates shown in the table could be further reduced. Table 6-2 describes the components listed in Table 6-1, including the estimated remaining useful service live for each.

Table 6-1. Condition Assessment Summary

Item	Description	Remaining Useful life	Reuse Potential
A	Marina Overview	--	--
B	Marina Utility Shed	0	None
C	Covered Boat Dock - East	10	Low
D	Mooring Dock	20	High
E	Covered Boat Dock - Central	15	High
F	Houseboat Dock - West	20	High
G	House Boat Service Dock	5	Low
H	Marina Store	5	Low
I	Dock Attached to Marina Store	3	Very Low
J	Entrance Ramp	10	High
K	Gas Dock	0	None
L	Houseboat Anchorage	10	Medium
M	Land Based Infrastructure / Facilities	10	Low

Table 6-2. Condition Assessment Detail

Item	Description	Comment
A	Existing Marina	--
B	Marina Utility Shed	According to the concessionaire, the marina utility shed was damaged and dislodged from the main marina structure during recent winter storms. It was relocated to the east portion of the marina for storage. Based on observed conditions, this structure has no useful life remaining. Reference pictures B1 through B2
C	Covered Boat Dock - East	This covered dock is in fair condition. The dock is built upon exposed styrofoam floats which are showing some signs of deterioration. Useful life is estimated to be 10 years if expanded polystyrene foam (EPS) is allowed to remain. Assumption is made that exposed styrofoam floats will no longer be allowed and must be replaced. Based on this assumption, useful life estimated to be 0 years or a significant re-float effort may be required. Reference pictures C1 through C6.
D	Mooring Dock	The mooring dock is in very good condition and appears relatively new. The dock is supported by encapsulated EPS floats. Useful life is estimated to be at least 20 years. Reference pictures D1 through D4
E	Covered Boat Dock - Central	The covered dock is in good condition and is supported by encapsulated EPS floats. Useful life is estimated to be at least 15 years. Reference pictures E1 through E6

Table 6-2. Condition Assessment Detail

Item	Description	Comment
F	Houseboat Dock - West	The houseboat dock is one of the newer docks in the marina and appears to be in very good condition. The dock contains power and water facilities and is supported by encapsulated EPS floats. Useful life estimated to be at least 20 years. Reference pictures F1 through F10
G	House Boat Service Dock	The houseboat service dock is constructed of concrete and is supported by an unknown substrate. The dock is showing signs of cracking and spalling edges and would not likely be conducive to supporting a modern marina operation. Useful life estimated to be 5 years. Reference pictures G1 through G7.
H	Marina Store	The marina store is in fair to poor condition. The bathrooms have been recently remodeled; however the remaining facility is showing substantial wear and damage. The structure is supported on exposed EPS floats which show significant deterioration. In addition, the decking panels are generally in disrepair. The sewage ejection system with radio based level controls appears new and could be salvaged. The electrical transformers and panels are beginning to rust. Maintenance on the power distribution panel has probably been minimal. Some electrical equipment is installed with substandard wiring techniques. Electrical terminations and components have probably corroded and aged prematurely in the marine environment. The remaining MEP components are nearing the end of their useful life, although some components may have salvage value. No roof leaks were observed. Useful life estimated to be 5 years if exposed styrofoam is allowed to remain. Assumption is made that exposed styrofoam floats will no longer be allowed and must be replaced. Based on this assumption, useful life estimated to be 0 years. Reference pictures H1 through H39.
I	Dock Attached to Marina Store	The dock directly attached to the marina store is constructed of wood and a composite walking surface. Deterioration was observed from wave damage and boat abrasion/ impact. Useful life estimated to be 3 years. Reference pictures I1 through I7.
J	Entrance Ramp	The entrance ramp onto the marina appears to be in relatively good condition. The ramp is supported on encapsulated floats. Useful life estimated to be 10 years. Reference pictures J1 through J4.
K	Gas Dock	The gas dock is constructed of wood decking and is a state of extreme disrepair. While it appears that the dock is currently being repaired to mitigate any further deterioration, useful life estimated to 0 years. Reference pictures K1 through K3.
L	Houseboat Anchorage	The houseboat anchorage consists of a grid of cables and mooring balls as depicted on the LTDP drawing 5. While the system appears to be in good condition, a significant portion of the system will have to be reconstructed if the marina is relocated. Useful life estimated to be 10 years. Reference pictures L1 through L3.
M	Land Based Infrastructure and Facilities	The land based facilities that support the floating marina consist of septic tanks and piping, fuel storage and piping, fuel island, electrical transformer, main power switchboard, underground and exposed conduit, portable power cables, and a water supply and piping. In addition, there are the access road, two parking areas, fencing, the well site, and a shop/office building. The access road within the scope of this study includes that portion within the marina boundary, not the entire length from the intersection with Highway 49 to the marina. These facilities are in fair condition. Due to low lake levels, it appears that that a new septic poly tank was added and electrical cables have been extended to the floating facility. Average useful life estimated to be 10 years. Reference pictures M1 through M11.

6.2 Cost Estimates

Two sets of cost data have been developed based on the assessment of conditions at the New Melones Lake Marina. The first includes Class 4 conceptual estimates of the expenditures that would be required to replace structures with useful lives of less than 5 years and to refurbish land-based infrastructure; those costs aggregate to over $2.95 million.[37] The second set of costs is for relocating the marina to mitigate the storm damage potential that exists at the present site; estimated relocation costs aggregate to over $760,000 for a total cost of approximately $3.7 million.[38] Additionally, a Class 4 conceptual-level estimate was developed to price the replacement of the entire marina, regardless of age or condition, at its existing location. Those costs aggregate to $4.73 million ($4.01 million to replace the floating marina components plus $0.72 million to replace land-based components).

All cost estimates are based upon 2010 dollar values, are based on four percent cost escalation to year 2012, include a 15-percent contingency for contractor markup, and a 15-percent contingency for design. For more detail on the engineering cost estimates, refer to Appendix B.

[37] Facilities included in the cost estimate are the marina utility shed, covered boat dock, mooring dock, houseboat dock, house boat service dock, marina store, dock attached to marina store, entrance ramp, gas dock, houseboat anchorage, and other land-based infrastructure and facilities.

[38] Facilities and activities included in the cost estimate are the floating component relocation, parking lot, lighting, access and launch ramp concrete, electrical substation, distribution to first connection point, fuel tank, fuel piping and equipment, septic tank, septic piping, and water piping.

Chapter 7
Financial Feasibility Evaluation

This section represents the financial feasibility evaluation for prospective commercial services at New Melones Lake, focusing on those services that would be provided under concessions contracts. This section first provides a general overview of financial feasibility studies, their role in business planning, and common measures of financial feasibility. Next is a summary of the financial feasibility evaluation as it relates specifically to commercial services at Reclamation facilities, including the key factors and framework used to estimate financial feasibility. This financial framework is applied to prospective commercial services under consideration at New Melones Lake. Because there is substantial uncertainty in the assumptions used in this evaluation, this section also presents a sensitivity analysis that shows how financial performance changes with changes in key assumptions.

It should be noted that the financial feasibility evaluation presented in this chapter is based on planning-level estimates of capital and development costs and operating revenues and expenses. Accordingly, the results are not intended to provide assurances regarding the financial profit or loss of prospective commercial services at New Melones Lake. Instead, the results of the financial feasibility evaluation should be considered in the context of the analytical assumptions implicit to the analysis and used as an indicator of financial performance of prospective commercial services. Further, although Chapter 4 considers the effects that future water level fluctuations at New Melones Lake may have on the demand for concessions services, it is not possible to accurately estimate the effect of long-term water supply management at the reservoir on the financial feasibility of prospective commercial services.

7.1 Overview of Financial Feasibility Studies

7.1.1 Role of Financial Feasibility in Business Planning

Government statistics show that the failure rate for new businesses is high. According to the U.S. Small Business Administration, roughly half of small businesses fail within the first five years.[39] Success is based on, and requires, exhaustive planning and research in many areas, including such factors as competition, demand, marketing, and pricing. All of these factors, and potentially many others, are integral to the assessment of the financial feasibility of a proposed business.

[39] Small Business Administration. Website: http://www.sba.gov/smallbusinessplanner/plan/getready/SERV_SBPLANNER_ISENTFORU.html, accessed March 8, 2010.

Financial feasibility evaluation in the broadest sense refers to the assessment of the potential success or failure of a business measured against specific financial thresholds. If in planning for a new business, a potential entrepreneur or investor concludes that the business will meet or exceed those thresholds, the business may be considered to be financially feasible.[40] Given the alternative uses and scarcity of capital and because of the risks associated with any new business, a financial goal will typically include some measure which exceeds that which could be earned in a risk-free investment, such as U.S. Treasury debt instruments.[41]

7.1.2 Measures of Financial Feasibility

Within capitalistic systems, financial feasibility most typically involves some measure of profitability from a business. Common metrics include net profit; earnings (profit) before interest, depreciation, taxes, and amortization (EBIDTA); return on investment (ROI); and internal rate of return (IRR).

Net profit refers to the difference between revenues from all sources and all costs, including income taxes. It includes both operating and non-operating measures, the former arising from the actual sale of the specific goods and services produced by the enterprise. Non-operating costs reflect the administrative and related expenses required in running any business, but not specific to the goods and services being sold.

EBIDTA is a quantitative description of the operating profitability of a business. It is measured by subtracting from total operating revenues all costs, excluding interest, depreciation, taxes, and amortization. The four excluded expenses may vary significantly even among businesses of similar size within the same industry. Differences arise because of variations in many areas, including:

- Assets – current, e.g. cash and inventory, versus fixed, e.g. buildings and machinery
- Liabilities – debt, i.e. owed to lenders, versus equity capital, provided by business owners
- Interest expenses, which may differ because of the times that loans were obtained, amount of debt versus equity financing, length of loans, and guarantees and collateral required by lenders
- Depreciation, which will differ depending on the service lives of capital assets and when they are actually purchased
- Taxes, which vary depending on different rate structures both between and within states

[40] The ultimate success or failure of the business will, of course, support or refute the preliminary judgment of financial feasibility.

[41] "Risk free" as used here means that return on capital during the term of the instrument and return of capital at maturity of the instrument are both without risk.

- Amortization, which for a new business typically refers to the payment of a loan over a specified number of periods and which may differ among borrowers

Because EBIDTA excludes these expenses, which can vary widely among otherwise similar businesses, it is considered a better measure of the actual operating finances of a business than, e.g., net profit.

Return on investment (ROI) is a measure that can be used to assess the profitability of an investment or to choose from among alternative investments. ROI can be expressed for a single period or for multiple periods. In its simplest form, ROI is measured as the ratio:

(Gain from investment – cost of investment) / (Cost of investment)

Internal rate of return (IRR) is the annualized effective compounded return rate that can be earned on the invested capital. It represents the interest (discount) rate which equates the cost of an asset with the present value of the expected cash flows from the investment over time. It is typically calculated using the formula:

Cost of asset = Present value of anticipated cash flows

The IRR calculation rests on a critical assumption that all cash flows from an investment are reinvested by the business through the end of the investment's service life.

7.2 Financial Feasibility in the Commercial Service Planning Process

Financial feasibility evaluation plays an important role in the commercial service planning process at Reclamation facilities. The evaluation of financial feasibility is a required component of commercial services plans, as outlined in *Reclamation Manual, Directives and Standards, LND 04-01*. This section presents the financial framework applied to the financial feasibility evaluation for commercial services at New Melones Lake.

The primary purpose of the financial feasibility evaluation is to determine whether proposed commercial services are financially viable. Ancillary purposes include estimating fees to be returned to the federal government, providing justification for the proposed length of term of concessions contracts, and estimating capital investment responsibilities for the concessionaire and Reclamation.

7.2.1 Key Factors Affecting Financial Feasibility

There are a number of key factors that affect the financial feasibility of recreation-oriented services provided at Reclamation facilities. Each is discussed in more detail below relative to proposed services at New Melones Lake.

Visitation Projections

One of the primary factors affecting the financial viability of recreation-based commercial opportunities is visitation levels. Annual visitation at New Melones Lake has averaged over 700,000 visitors between 2004 and 2008, and has been driven by a number of factors, including lake level and economic conditions. Population in the primary market area is a key factor influencing recreation demand at the lake. While it is difficult to forecast hydrologic and economic conditions, population projections are available from the California Department of Finance. Population projections for the primary market area serving New Melones Lake are presented in Table 3-5. The data show that population is expected to increase by approximately 1.1 to 1.3 percent annually through year 2050. For this analysis, these rates were used to project sales and operating revenues for select commercial services over the term of concessions contracts.

Length of Season

Typical for most types of recreation, visitation levels at New Melones Lake fluctuate seasonally. Visitation at New Melones over the peak recreation season (i.e., May through September) accounts for approximately 62 percent of total visitation at the lake (see Table 3-3). In addition, water-based activities, such as boating, are most common during the summer months when the air and water temperatures are relatively warm. These patterns are of particular importance for commercial services that focus on water-based recreation, such as marina facilities. These types of facilities are subject to substantial fluctuations in operating revenues over the course of the year, which could make it difficult to recover operating costs during the off season. Accordingly, the financial feasibility evaluation considers both year round and seasonal (May-September) operation of prospective commercial services.

Rates

The rates charged by prospective commercial operators have a direct influence on operating revenues. Rates for all commercial services operated under a concessions contract must be approved by Reclamation on an annual basis. For those services already provided at the existing marina, the current approved rate structure was used in the financial feasibility evaluation. For services not currently provided at New Melones Lake, prospective rates were based on research on commercial operations offering similar services in the region. Differences in rates across seasons can also factor into concessions planning, with higher rates charged during peak demand periods and lower rates in off-peak periods.

Term of Concessions Contract

LND 04-01 states that the term of all contracts should be limited to the shortest period practical and should be based on the investment required of the concessionaire. The term of the contract requiring minimal or no new capital investment should generally not exceed five years, and when substantial investment is required, the term should be set to ensure that concessionaires receive a reasonable rate of return on their investment. All of the prospective commercial services under consideration at New Melones Lake would require a large capital investment for facility development. As a result, the term of the concessions contract would need to extend well into the future. Based on contracts recently implemented at other Reclamation facilities, three different contract terms were considered in this evaluation: 20, 30, and 40 years.

Capital Investment Responsibility

Initial capital investment costs can directly affect the financial viability of any business, including prospective commercial service ventures at New Melones Lake. The decision by Reclamation to participate in any type of cost-sharing arrangement could also affect the required returns to the federal government in the form of franchise and occupancy fees. However, cost-sharing opportunities are only available to non-federal partners and do not apply to private concessionaires. Therefore, for this analysis, only one scenario was considered where the concessionaire would be responsible for all capital costs.

Appropriate Rate of Return on Capital Investment

By definition, capital is a scarce resource with many potential uses with equally many potential returns and risks. The owners of capital can be reasonably assumed to seek a minimum level of financial return on the capital they invest in a business. That minimum level is frequently approximated as the sum of a risk-free return (e.g. that on U.S. government debt instruments) and an allowance for risk. The incremental desired return for risk will vary widely among capital owners depending on such factors as their knowledge of and experience in businesses and alternative uses of capital. Thus, if a government security of a particular maturity yields a risk-free 5 percent annual return and a capital owner requires an additional return of 10 percent annually to compensate for risk, the threshold return for that owners would be 15 percent per year. If owners determine that the capital investment is likely to provide a return of at least that level, they would invest the capital, all other factors equal. If the expected return is less than the required level, they would not make that investment.

Fees Paid to the Federal Government

Fees paid to the federal government for the right to operate commercial services at Reclamation facilities may include franchise and occupancy fees. Franchise fees are typically payments made to the government based on a percentage of gross revenues. Occupancy fees represent a flat-rate rent paid by the concessionaire for use of the federal estate. Franchise and occupancy fees are typically negotiated on a case-by-case basis depending on the specific

circumstances of each commercial opportunity. For this analysis, a range of franchise and occupancy fees is considered to evaluate financial feasibility, centered on the current franchise fee of four percent and occupancy fee of $1,000 for the existing marina operation.

7.2.2 Financial Feasibility Framework

The framework used to conduct the financial feasibility evaluation is founded on basic financial and accounting concepts and reflects Reclamation's requirements outlined in LND 04-01. This section provides an overview of financial concepts that have been applied to prospective commercial services at New Melones Lake. Specifically, for each commercial service, the following financial information is provided in Section 7.3.

Income and Expense Statement

An income and expense statement compares operating and non-operating revenues and expenses over a specified period such as a month, quarter, or year. For this study, operating revenues represent gross revenues (or sales) and are organized by operating department (i.e., source of revenue). For example, a marina may realize revenues from slip rentals, boat rentals and gas sales; estimated revenues are tracked separately for each. Operating expenses include payments to labor, cost of goods sold, and utilities and repairs and maintenance. Non-operating expenses include general and administrative expenses, such as rent, interest, depreciation, reserve accounts,[42] and payments to the federal government as franchise and occupancy fees. Based on the income and expense statement for the prospective commercial services at New Melones Lake, several measures of financial feasibility can be estimated, including EBIDTA and net profit.

Capital Investment Requirements

Capital investment requirements of any business venture can greatly affect financial feasibility. Capital costs associated with prospective commercial service developments at New Melones Lake would include the cost of new facility development (e.g., structures and utilities); furniture, fixtures and equipment that are used to provide services; and ongoing capital replacement, particularly with long-term concessions contracts. Estimates of capital investment requirements have been prepared for prospective commercial services at New Melones Lake.

Cash-Flow Analysis

A cash-flow analysis shows the cash which a business will generate over time and excludes non-cash expenses, such as depreciation. It allows one to evaluate financial performance at different periods of time. For example, initial capital investment costs typically generate negative cash flow in the early years of

[42] Reserve accounts can come in the form of a Reserve Account for Facility Improvement (RAFI), which is needed to make funds systematically available for the ongoing improvement, construction, and renovation of concession facilities, specifically, significant nonrecurring capital improvement projects.

business ventures. A cash-flow analysis also considers periodic capital replacement costs and reimbursement for fixed assets at end of contract.

7.3 Financial Feasibility of Proposed Commercial Services at New Melones Lake

This section presents the results of the financial feasibility evaluation for prospective commercial services at New Melones Lake. The focus of the financial analysis is on those services that would be operated under concessions contract, rather than special use permits. Other authorized uses, which can be provided at the discretion of the concessionaire, are excluded from the analysis.

Based on the results of the commercial service planning process, there are three sets of commercial services considered in the financial feasibility evaluation: (1) marina services; (2) RV Park; and (3) equestrian riding stables. For this analysis, each type of concession opportunity is analyzed independently. A set of analytical assumptions common to all concessions is presented first and represents the "base case" for the financial evaluation. Facility-specific assumptions are presented in Appendix C. For each prospective concession, a general description is provided to further characterize and describe the type of service under consideration.

Following is the financial evaluation, which consists of four parts. The first is an estimate of capital investment costs, which is based on information collected for comparable facilities and business operations. The second is an estimate of annual operating income and expenses, which is based on assumptions concerning rates (prices) and projected sales over time, which are a function of projected visitation levels and capacity levels of proposed services. Third is a cash-flow analysis that shows how the financial performance of proposed concessions would vary over the contract term. The last is a financial summary that reports key financial metrics, including EBIDTA, net profit, net present value of cash flow, return on investment (ROI), and internal rate of return (IRR). (More detailed tables reporting year-by-year results are presented in Appendix D.) A sensitivity analysis that shows how these financial metrics vary with changes in key assumptions is presented in Section 7.4.

7.3.1 Analytical Assumptions

For the purposes of the financial feasibility evaluation, several key analytical assumptions were made that are applicable to all concessions opportunities under review. These assumptions are tied to factors described in Section 7.2.1. Changes in these assumptions can affect the financial feasibility of the concession opportunities, which is illustrated by the sensitivity analyses presented in the financial summary for each concession. Unless otherwise noted, the key assumptions are as follows:

- Visitation: Visitation is projected to increase at the rate of population growth in the primary market area, approximately 1.1 to 1.3 percent per year. Increases in visitation are assumed to influence gross sales for a range of concessions services.
- Length of Season: It is assumed that all concessions would operate year round.
- Rates: The rates charged for concessions services are based on current rates (for existing marina services) and market research for new services not currently available at New Melones Lake.
- Term of Concessions Contract: All concessions contracts are assumed to be 30 years.
- Capital Investment Responsibility: The prospective concessionaire would be responsible for all capital investment (development) costs.
- Appropriate Rate of Return on Capital Investment: The appropriate rate of return on capital, or discount rate, is 15 percent.
- Fees Paid to the Federal Government: The franchise fee on all concessions is 4 percent of gross revenues. An additional occupancy fee of $1,000 per year is also levied on all concession operations.

7.3.2 Marina Services

The financial feasibility evaluation for marina services is based on the development of a new marina at its existing location, including complete replacement of all floating and land-based components; it does not include marina relocation. The analysis considers an integrated marina complex that provides the following services: slip and mooring rentals, houseboat rentals, other motorized watercraft rentals, a recreation supply and convenience store, dry boat storage, boat repair, and prepared food service (outdoor grill). It is assumed that the physical capacity of the new marina would be similar to the current marina. Key assumptions regarding the size, equipment, and operations of the marina are presented in Table C-2.

Capital Investment Costs

Table 7-1 shows estimated capital investment costs for all facilities included in the marina complex. These values are based on capital cost estimates for the marina from Appendix B,[43] cost estimates for other integrated marina facilities based on comparable marina developments, and current market prices for watercraft. In total, the development costs for the suite of marina facilities is approximately $8.4 million. The largest component of capital costs is the marina-related buildings and structures at a cost of $4.7 million. The other significant cost component is the purchase of rental watercraft, requiring over $3.4 million in up-front expenditures.

[43] See Appendix B Table 6

Table 7-1. Capital Investment Costs for Marina-Related Services

Category	Operating Department					Total
	Marina	Boat Rental	Restaurant		Dry Boat Storage	
Planning and Design	$4,733,000	$0	$7,000		$12,000	**$4,751,000**
Site Clearing & Preparation		$0	$0		$5,000	**$5,000**
Vertical Building Costs		$0	$50,000		$142,000	**$192,000**
Miscellaneous Costs		$3,439,000	$34,000		$0	**$3,473,000**
Power Connection		$0	$0		$0	**$0**
Parking Space Development		$0	$0		$0	**$0**
Total	**$4,733,000**	**$3,439,000**	**$91,000**		**$158,000**	**$8,421,000**

Operating Revenues and Costs

Income and expenses for marina services were developed based primarily on financial statements and operating trends for existing marina operations over the past several years; this information is implicit to the operating assumptions outlined in Appendix C (Table C-2). For example, the multi-year waiting list for slip rentals maintained by the existing marina operator indicate that these facilities would operate at or near capacity over the contract term assuming no change in the number of slips and moorings. In addition, it was assumed that the rates charged for marina services would be similar to the current rate structure presented in Section 2.4.1. For new services recommended at the marina (i.e., dry boat storage and food service), revenues and cost data are based on information collected from comparable facilities.

The income and expense statement for marina services is shown in Table 7-2.[44] Operating revenues are projected to range between $2.70 million and $3.31 million annually over the contract term of 30 years. The largest source of revenues is expected to come from boat rentals, primarily houseboats. Rental of mooring and slip spaces is also expected to be a key generator of revenue based on keeping the size of the marina comparable to existing facilities and high occupancy rates.

Labor costs are the largest expense for the marina, about $838,000 annually. Other substantial expenses include the costs of items sold, maintenance and repair, insurance, and payments to the federal government as franchise fees and occupancy rates. Franchise fees generated by marina operations are projected to range from $107,000 to $132,000 annually over the contract term.

[44] Income and expenses are shown in five-year increments. Data for all years are presented in Appendix D.

Table 7-2. Operating Revenues and Expenses for Marina-Related Services

	Average Annual Values					
	Years 1-5	Years 6-10	Years 11-15	Years 16-20	Years 21-25	Years 26-30
REVENUES BY OPERATING DEPARTMENT						
Moorings and Slip Rentals	$990,000	$990,000	$990,000	$990,000	$990,000	$990,000
Gas Sales	$237,000	$253,000	$270,000	$288,000	$306,000	$323,000
Boat Repair	$20,000	$20,000	$20,000	$20,000	$20,000	$20,000
Boat Rentals	$1,082,000	$1,155,000	$1,232,000	$1,314,000	$1,398,000	$1,476,000
Recreation Supply Store	$114,000	$121,000	$129,000	$138,000	$147,000	$155,000
Dry Storage	$74,000	$79,000	$84,000	$90,000	$95,000	$101,000
Outdoor Grill	$181,000	$193,000	$206,000	$219,000	$233,000	$246,000
Total Annual Operating Revenues	***$2,697,000***	***$2,810,000***	***$2,930,000***	***$3,058,000***	***$3,189,000***	***$3,310,000***
EXPENSES						
Cost of Sales	$286,000	$305,000	$325,000	$347,000	$369,000	$389,000
Personnel Expenses	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000
Maintenance & Repair	$211,000	$225,000	$240,000	$256,000	$272,000	$287,000
Other Operating	$15,000	$16,000	$18,000	$19,000	$20,000	$21,000
Insurance	$150,000	$150,000	$150,000	$150,000	$150,000	$150,000
Franchise Fee	$107,000	$112,000	$117,000	$122,000	$128,000	$132,000
Annual Lease	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000
Refunds	$4,000	$4,000	$4,000	$4,000	$4,000	$4,000
Total Annual Operating Expenses	***$1,613,000***	***$1,652,000***	***$1,693,000***	***$1,737,000***	***$1,782,000***	***$1,823,000***
Income Taxes (Federal & State) per yr	$64,000	$99,000	$136,000	$173,000	$210,000	$244,000
Depreciation per yr	$475,000	$475,000	$475,000	$475,000	$475,000	$475,000
Interest per yr	$442,000	$442,000	$442,000	$442,000	$442,000	$442,000
Total Expenses per yr	***$2,593,000***	***$2,667,000***	***$2,746,000***	***$2,827,000***	***$2,909,000***	***$2,985,000***
EBITDA	**$1,085,000**	**$1,158,000**	**$1,237,000**	**$1,321,000**	**$1,407,000**	**$1,487,000**
Net Profit ($)	**$104,000**	**$143,000**	**$184,000**	**$231,000**	**$280,000**	**$326,000**
Net Profit (% of Revenues)	**3.9%**	**5.1%**	**6.3%**	**7.6%**	**8.8%**	**9.8%**

Accounting for income and expenses, estimates of EBIDTA for marina facilities are between $1.09 million and $1.49 million per year. Taking into account taxes, depreciation and interest, net annual profits are estimated at $104,000 to $326,000, equating to annual profit rates (relative to gross revenues) of 3.9 percent to 9.8 percent.

Cash-Flow Analysis

Estimates of cash flow at specific years during the contract term are shown in Table 7-3.[45] Initial cash investments to cover the non-financed portion of capital costs are reflected in Year 0. Cash flows fluctuate based on the need for periodic replacement of capital and changes in operating revenues and costs. At the end of the contract term, estimated cash holdings are approximately $14.96 million.

[45] Cash flow data for all years are presented in Appendix D.

Table 7-3. Cash-Flow Analysis for Marina-Related Services

	Year						
	0	**5**	**10**	**15**	**20**	**25**	**30**
Cash In							
Beginning Cash	$0	($260,000)	$2,445,000	$4,494,000	$7,632,000	$10,157,000	$13,792,000
Sales	$0	$2,740,000	$2,856,000	$2,979,000	$3,110,000	$3,241,000	$3,379,000
Other Revenues	$0	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000
Sale of Assets	$0	$0	$0	$0	$0	$0	$1,292,000
Total Available Cash	***$0***	***$2,481,000***	***$5,302,000***	***$7,474,000***	***$10,744,000***	***$13,399,000***	***$18,464,000***
Cash Out							
Salaries	$0	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000
Other Operating Expenses	$0	$790,000	$829,000	$872,000	$917,000	$962,000	$1,009,000
Loan Payments	$189,000	$509,000	$509,000	$509,000	$509,000	$509,000	$509,000
Capital Expenditures	$2,105,000	$9,000	$868,000	$9,000	$868,000	$9,000	$883,000
Tax Payments	$0	$77,000	$113,000	$151,000	$188,000	$225,000	$264,000
Total Cash Out	***$2,295,000***	***$2,223,000***	***$3,158,000***	***$2,379,000***	***$3,321,000***	***$2,542,000***	***$3,503,000***
Annual Cash Flow	**($2,295,000)**	**$519,000**	**($302,000)**	**$601,000**	**($209,000)**	**$700,000**	**$1,169,000**
Cumulative Cash Flow	**($2,295,000)**	**$259,000**	**$2,144,000**	**$5,095,000**	**$7,423,000**	**$10,857,000**	**$14,961,000**

Note: Values represent specific points in time; a complete year-by-year cash-flow analysis is available in Appendix D

Financial Summary[46]

Table 7-4 shows the results of the financial feasibility evaluation for the proposed marina, as measured by the key financial metrics considered in this study. On an annual basis, EBIDTA and net profit are projected to average $1.28 million and $212,000, respectively. In net present value terms, the annualized cash flow for marina services is approximately $136,000 and about $895,000 cumulatively. Over the contract term, the ROI for the marina is estimated at 10.6 percent and the IRR is 21.8 percent. Based on these metrics, the financial feasibility evaluation indicates that a comprehensive full-service marina facility would likely be financially viable over the long term.

Table 7-4. Results of the Financial Feasibility Analysis for Marina-Related Services

Financial Metric	Annual Average	Cumulative
EBIDTA	$1,284,000	$38,528,000
Net Profit ($)	$212,000	$6,367,000
Net Present Value of Cash Flow	$136,000	$895,000
ROI	--	10.6%
IRR	--	21.8%

[46] The summary of financial information for all prospective concessions at New Melones Lake are based on planning-level estimates and are not intended to ensure the profit or loss of any concession opportunity considered in this study.

7.3.3 RV Park

As analyzed, the RV Park consists of a 75-unit campground supplemented by a small campground store selling recreation supplies and convenience store items. Initial occupancy rates are assumed to be about 50 percent during the peak recreation season and 25 percent during off-peak periods, which are in line with national averages. Because the RV facility would not be operating at capacity, campground registration revenues are expected to increase in line with projected increases in visitation to the lake. Accordingly, campground occupancy rates would increase over time with no change in campground capacity.

Capital Investment Costs

Based on representative costs for other RV campground developments, estimated capital costs for the proposed RV Park is approximately $821,000 (see Table 7-5). Of this total, power costs account for $320,000, followed by parking space development at $233,000 and building costs at $130,000.

Table 7-5. Capital Investment Costs for RV Park

Category	Cost ($)
Planning and Design	$61,000
Site Clearing & Preparation	$40,000
Vertical Building Costs	$130,000
Miscellaneous Costs	$38,000
Power Connection	$320,000
Parking Space Development	$233,000
Total	**$821,000**

Operating Revenues and Costs

As shown in Table 7-6, annual average operating revenues at the RV Park would be generated primarily by campground registrations, which range from $480,000 to $655,000 annually over the contract term. The assumptions behind revenue projections for an RV Park are outlined in Appendix C (Table C-3). Total average annual operating revenues and expenses are estimated to range from $578,000 to $788,000 and $421,000 and $522,000, respectively. Based on these assumed revenues and expenses, the estimated average annual EBIDTA is $157,000 during years 1-5 and increases to $266,000 by years 26-30. Annual net profit expected to be earned at the RV Park increases from 11.7 percent in years 1-5 to 15.8 percent in years 26-30.

Table 7-6. Operating Revenues and Expenses for RV Park

	Average Annual Values					
	Years 1-5	**Years 6-10**	**Years 11-15**	**Years 16-20**	**Years 21-25**	**Years 26-30**
REVENUES BY OPERATING DEPARTMENT						
Registrations	$480,000	$512,000	$546,000	$583,000	$620,000	$655,000
Store Sales	$98,000	$104,000	$111,000	$119,000	$126,000	$133,000
Other Income	$0	$0	$0	$0	$0	$0
Total Operating Revenues	***$578,000***	***$616,000***	***$658,000***	***$701,000***	***$746,000***	***$788,000***
EXPENSES						
Cost of Sales	$56,000	$60,000	$64,000	$68,000	$73,000	$77,000
Personnel Expenses	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000
Maintenance & Repair	$61,000	$65,000	$70,000	$74,000	$79,000	$83,000
Other Operating	$138,000	$148,000	$157,000	$168,000	$179,000	$189,000
Insurance	$21,000	$21,000	$21,000	$21,000	$21,000	$21,000
Franchise Fee	$23,000	$25,000	$26,000	$28,000	$30,000	$32,000
Annual Lease	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000
Total Operating Expenses	***$421,000***	***$439,000***	***$459,000***	***$480,000***	***$502,000***	***$522,000***
Income Taxes (Federal & State)	$30,000	$39,000	$50,000	$61,000	$72,000	$82,000
Depreciation	$16,000	$16,000	$16,000	$16,000	$16,000	$16,000
Interest	$43,000	$43,000	$43,000	$43,000	$43,000	$43,000
Total Expenses	***$510,000***	***$538,000***	***$568,000***	***$600,000***	***$633,000***	***$663,000***
EBITDA	**$157,000**	**$177,000**	**$198,000**	**$221,000**	**$244,000**	**$266,000**
Net Profit	**$67,000**	**$78,000**	**$89,000**	**$101,000**	**$113,000**	**$124,000**
Net Profit (% of Revenues)	**11.7%**	**12.7%**	**13.6%**	**14.4%**	**15.2%**	**15.8%**

Cash-Flow Analysis

The cash-flow analysis for the RV Park is presented in Table 7-7, including estimates of annual and cumulative cash flows at select years over the contract term. By the end of the contract term, estimated total cumulative cash flow is estimated to be $3.27 million.

Table 7-7. Cash-Flow Analysis for RV Park

	Year						
	0	**5**	**10**	**15**	**20**	**25**	**30**
Cash In							
Beginning Cash	$0	$82,000	$511,000	$995,000	$1,537,000	$2,140,000	$2,804,000
Sales	$0	$593,000	$632,000	$675,000	$720,000	$764,000	$812,000
Other Revenues	$0	$0	$0	$0	$0	$0	$0
Sale of Assets	$0	$0	$0	$0	$0	$0	$328,000
Total Available Cash	***$0***	***$675,000***	***$1,143,000***	***$1,669,000***	***$2,257,000***	***$2,904,000***	***$3,944,000***
Cash Out							
Salaries	$0	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000
Other Operating Expenses	$0	$308,000	$327,000	$348,000	$369,000	$391,000	$414,000
Loan Payments	$18,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000
Capital Expenditures	$205,000	$0	$0	$0	$0	$0	$0
Tax Payments	$0	$34,000	$43,000	$54,000	$65,000	$76,000	$88,000
Total Cash Out	***$224,000***	***$511,000***	***$540,000***	***$571,000***	***$604,000***	***$636,000***	***$671,000***
Annual Cash Flow	**($224,000)**	**$82,000**	**$92,000**	**$104,000**	**$116,000**	**$128,000**	**$469,000**
Cumulative Cash Flow	**($224,000)**	**$163,000**	**$603,000**	**$1,098,000**	**$1,653,000**	**$2,268,000**	**$3,273,000**

Note: Values represent specific points in time; a complete year-by-year cash-flow analysis is available in Appendix D

Financial Summary[46]

The results of the financial feasibility evaluation for the RV Park are presented in Table 7-8. Over the contract term, EBIDTA is projected to average about $211,000 annually and total $6.33 million. Further, net profits are estimated to average $96,000 per year, and cumulatively total $2.87 million. In net present value terms, annualized and cumulative cash flows are an estimated $87,000 and $574,000 respectively, and the estimated ROI is 69.9 percent and IRR is 35.4 percent. Based on these parameters, the financial feasibility evaluation indicates that an RV Park would likely be financially viable over the long term.

Table 7-8. Results of the Financial Feasibility Analysis for RV Park

Financial Metric	Annual Average	Cumulative
EBIDTA	$211,000	$6,329,000
Net Profit ($)	$96,000	$2,872,000
Net Present Value of Cash Flow	$87,000	$574,000
ROI	--	69.9%
IRR	--	35.4%

7.3.4 Equestrian Stables

The equestrian riding stables would be integrated into the proposed equestrian staging area planned at the Peoria WMA. Services would be limited to horseback riding rentals; no boarding services would be offered. A range of

day-rides would be available, ranging from one-hour rides to longer specialty rides.

Capital Investment Costs

Estimated capital investment costs for the equestrian riding stables are presented in Table 7-9. A limited amount of cost savings is expected based on the integration of concessions services with the proposed equestrian staging area planned at the Peoria WMA; however, the prospective concessionaire would likely still incur some level of infrastructure development costs, such as the extension of electrical utilities to the site. In total, capital investment costs, including horses and tack, for the equestrian concession are estimated at $488,000.

Table 7-9. Capital Investment Costs for Equestrian Riding Stables

Category	Cost ($)
Planning and Design	$17,000
Site Clearing & Preparation	$60,000
Vertical Building Costs	$239,000
Miscellaneous Costs (including horses and tack)	$121,000
Power Connection	$50,000
Parking Space Development	$0
Total	**$488,000**

Operating Revenues and Costs

Table 7-10 presents operating revenues and expenses for the equestrian stables. Revenues are expected to increase over time as more people visit the lake and engage in horseback riding opportunities at the lake. Total average annual operating revenues at the equestrian stables would range between $332,000 and $443,000 per year, with the majority of revenues expected during the peak season. The assumptions behind revenue projections for equestrian riding stables are outlined in Appendix C (Table C-4). Over the contract term, average annual operating expenses range between $279,000 and $308,000 per year, including average annual government payments of $14,000 to $19,000 per year. The equestrian stable is projected to earn annual average profits ranging from 2.6 percent in years 1-5 to 14.6 percent in years 26-30.

Table 7-10. Operating Revenues and Expenses for Equestrian Riding Stables

	Average Annual Values					
	Years 1-5	**Years 6-10**	**Years 11-15**	**Years 16-20**	**Years 21-25**	**Years 26-30**
REVENUES BY OPERATING DEPARTMENT						
Peak Rental	$258,000	$275,000	$293,000	$313,000	$333,000	$351,000
Off-Peak Rental	$45,000	$48,000	$52,000	$55,000	$58,000	$62,000
Special Events	$30,000	$30,000	$30,000	$30,000	$30,000	$30,000
Total Operating Revenues	***$332,000***	***$353,000***	***$374,000***	***$397,000***	***$421,000***	***$443,000***
EXPENSES						
Hay	$13,000	$14,000	$15,000	$16,000	$17,000	$18,000
Bedding	$6,000	$6,000	$6,000	$7,000	$7,000	$8,000
Stall Cleaning	$17,000	$18,000	$19,000	$20,000	$21,000	$23,000
Vet / Farrier	$3,000	$3,000	$3,000	$3,000	$3,000	$4,000
Insurance	$4,000	$5,000	$5,000	$5,000	$5,000	$6,000
Manure Removal	$5,000	$5,000	$6,000	$6,000	$6,000	$7,000
Telephone	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000
Utilities	$13,000	$14,000	$15,000	$16,000	$17,000	$18,000
Office	$1,000	$1,000	$1,000	$1,000	$2,000	$2,000
Repair & Maintenance	$5,000	$5,000	$6,000	$6,000	$6,000	$7,000
Personnel Costs	$198,000	$198,000	$198,000	$198,000	$198,000	$198,000
Franchise Fee	$13,000	$14,000	$15,000	$16,000	$17,000	$18,000
Annual Lease	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000
Total Operating Expenses	***$279,000***	***$285,000***	***$290,000***	***$296,000***	***$303,000***	***$308,000***
Income Taxes (Federal & State)	$3,000	$6,000	$10,000	$15,000	$21,000	$28,000
Depreciation	$13,000	$13,000	$13,000	$13,000	$13,000	$13,000
Interest	$28,000	$28,000	$28,000	$28,000	$28,000	$28,000
Total Expenses	***$324,000***	***$333,000***	***$342,000***	***$353,000***	***$365,000***	***$378,000***
EBITDA	**$53,000**	**$68,000**	**$84,000**	**$101,000**	**$118,000**	**$134,000**
Net Profit	**$9,000**	**$20,000**	**$32,000**	**$44,000**	**$55,000**	**$65,000**
Net Profit (% of Revenues)	**2.6%**	**5.7%**	**8.6%**	**11.1%**	**13.2%**	**14.6%**

Cash-Flow Analysis

As shown in Table 7-11, estimated cash holding at the end of the contract term for the equestrian riding stable is an estimated $1.43 million.

Table 7-11. Cash-Flow Analysis for Equestrian Riding Stables

	Year						
	0	**5**	**10**	**15**	**20**	**25**	**30**
Cash In							
Beginning Cash	$0	($81,000)	$53,000	$246,000	$487,000	$798,000	$1,160,000
Sales	$0	$340,000	$361,000	$383,000	$407,000	$430,000	$455,000
Other Revenues	$0	$0	$0	$0	$0	$0	$0
Sale of Assets	$0	$0	$0	$0	$0	$0	$195,000
Total Available Cash	***$0***	***$259,000***	***$414,000***	***$629,000***	***$893,000***	***$1,228,000***	***$1,810,000***
Cash Out							
Salaries	$0	$198,000	$198,000	$198,000	$198,000	$198,000	$198,000
Other Operating Expenses	$0	$84,000	$89,000	$95,000	$101,000	$107,000	$114,000
Loan Payments	$12,000	$33,000	$33,000	$33,000	$33,000	$33,000	$33,000
Capital Expenditures	$135,000	$0	$0	$0	$0	$0	$0
Tax Payments	$0	$4,000	$8,000	$12,000	$17,000	$24,000	$32,000
Total Cash Out	***$147,000***	***$318,000***	***$327,000***	***$337,000***	***$349,000***	***$362,000***	***$376,000***
Annual Cash Flow	**($147,000)**	**$22,000**	**$34,000**	**$46,000**	**$58,000**	**$68,000**	**$274,000**
Cumulative Cash Flow	**($147,000)**	**($59,000)**	**$86,000**	**$292,000**	**$544,000**	**$866,000**	**$1,434,000**

Note: Values represent specific points in time; a complete year-by-year cash-flow analysis is available in Appendix D

Financial Summary[46]

As shown in Table 7-12, the financial feasibility evaluation indicates that an equestrian riding stable would earn an average EBITDA of $93,000 and net profit of $38,000 on an annual basis. In addition, the net present value of cash flows is $5,000 annually and $30,000 over the contract term. Further, the estimated ROI is 5.6 percent and IRR is 17.4 percent. Based on these parameters, the financial feasibility evaluation indicates that an equestrian riding stable would likely be financially viable over the long term.

Table 7-12. Results of the Financial Feasibility Analysis for Equestrian Riding Stables

Financial Metric	Annual Average	Cumulative
EBIDTA	$93,000	$2,798,000
Net Profit ($)	$38,000	$1,131,000
Net Present Value of Cash Flow	$5,000	$30,000
ROI	--	5.6%
IRR	--	17.4%

7.4 Sensitivity Analyses of Financial Feasibility

The key assumptions utilized in this financial feasibility evaluation have a direct bearing on the metrics used to determine the financial feasibility of proposed concessions at New Melones Lake. Table 7-13 (marina services), Table 7-14 (RV park), and Table 7-15 (equestrian stables) show how these financial metrics vary with changes in key assumptions. In addition, Table 7-16 presents additional analyses related to the financial viability of marina facilities based on different assumptions on capital costs.

7.4.1 Variation in Operating Assumptions

The following tables illustrate changes in financial metrics based on variations in operating assumptions.

Table 7-13. Sensitivity Analysis of Financial Feasibility for Marina Services [1,2]

Key Assumption	EBITDA (Annual Average)	Net Profit (Annual Average)	ROI	IRR
Visitation Levels[3]				
0%	$1,056,000	$89,000	7.3%	20.2%
1.1 to 1.3%	**$1,284,000**	**$212,000**	**10.6%**	**21.8%**
3%	$1,689,000	$442,000	16.2%	24.0%
Length of Season				
Year-Round	**$1,284,000**	**$212,000**	**10.6%**	**21.8%**
Peak Season Only	$1,234,000	$185,000	8.9%	20.7%
Rates[4]				
Existing Rates	**$1,284,000**	**$212,000**	**10.6%**	**21.8%**
Contract Term				
20	$800,000	$110,000	12.1%	22.4%
30	**$1,284,000**	**$212,000**	**10.6%**	**21.8%**
40	$1,284,000	$212,000	11.4%	21.9%
Capital Investment				
Concessionaire (100 percent)	**$1,284,000**	**$212,000**	**10.6%**	**21.8%**
Rate of Return on Capital				
10%	$1,284,000	$212,000	27.8%	21.8%
15%	**$1,284,000**	**$212,000**	**10.6%**	**21.8%**
20%	$1,284,000	$212,000	2.1%	21.8%
Franchise Fee				
2%	$1,344,000	$245,000	12.6%	23.1%
4%	**$1,284,000**	**$212,000**	**10.6%**	**21.8%**
10%	$1,104,000	$112,000	4.0%	17.6%
Occupancy Fee				
$0	$1,285,000	$213,000	10.7%	21.8%
$1,000	**$1,284,000**	**$212,000**	**10.6%**	**21.8%**
$5,000	$1,280,000	$210,000	10.5%	21.7%

1/ Values in bold represent baseline conditions
2/ The sensitivity analysis shows variation in key parameters holding all other parameters at baseline levels
3/ Values represent change in annual visitation levels
4/ No seasonal variation in rates was evaluated

Table 7-14. Sensitivity Analysis of Financial Feasibility for RV Park [1,2]

Key Assumption	EBITDA (Annual Average)	Net Profit (Annual Average)	ROI	IRR
Visitation Levels[3]				
0%	$149,000	$63,000	59.0%	32.7%
1.1 to 1.3%	**$211,000**	**$96,000**	**69.9%**	**35.4%**
3%	$320,000	$154,000	86.5%	38.5%
Length of Season				
Year-Round	**$211,000**	**$96,000**	**69.9%**	**35.4%**
Peak Season Only	$139,000	$56,000	42.0%	21.8%
Rates[4]				
Existing Rates	**$211,000**	**$96,000**	**69.9%**	**35.4%**
Contract Term				
20	$126,000	$56,000	68.1%	35.4%
30	**$211,000**	**$96,000**	**69.9%**	**35.4%**
40	$211,000	$96,000	71.2%	35.4%
Capital Investment				
Concessionaire (100 percent)	**$211,000**	**$96,000**	**69.9%**	**35.4%**
Rate of Return on Capital				
10%	$211,000	$96,000	106.9%	35.4%
15%	**$211,000**	**$96,000**	**69.9%**	**35.4%**
20%	$211,000	$96,000	50.9%	35.4%
Franchise Fee				
2%	$225,000	$103,000	75.1%	38.0%
4%	**$211,000**	**$96,000**	**69.9%**	**35.4%**
10%	$170,000	$74,000	53.2%	26.9%
Occupancy Fee				
$0	$212,000	$96,000	70.3%	35.6%
$1,000	**$211,000**	**$96,000**	**69.9%**	**35.4%**
$5,000	$207,000	$94,000	68.2%	34.5%

1/ Values in bold represent baseline conditions
2/ The sensitivity analysis shows variation in key parameters holding all other parameters at baseline levels
3/ Values represent change in annual visitation levels
4/ No seasonal variation in rates was evaluated

Table 7-15. Sensitivity Analysis of Financial Feasibility for Equestrian Riding Stables [1,2]

Key Assumption	EBITDA (Annual Average)	Net Profit (Annual Average)	ROI	IRR
Visitation Levels[3]				
0%	$47,000	$4,000	-9.4%	9.1%
1.1 to 1.3%	**$93,000**	**$38,000**	**5.6%**	**17.4%**
3%	$175,000	$83,000	25.5%	23.8%
Length of Season				
Year-Round	**$93,000**	**$38,000**	**5.6%**	**17.4%**
Peak Season Only	$152,000	$74,000	51.5%	44.4%
Rates[4]				
Existing Rates	**$93,000**	**$38,000**	**5.6%**	**17.4%**
Contract Term				
20	$51,000	$18,000	4.6%	17.2%
30	**$93,000**	**$38,000**	**5.6%**	**17.4%**
40	$93,000	$38,000	6.6%	17.7%
Capital Investment				
Concessionaire (100 percent)	**$93,000**	**$38,000**	**5.6%**	**17.4%**
Rate of Return on Capital				
10%	$93,000	$38,000	27.4%	17.4%
15%	**$93,000**	**$38,000**	**5.6%**	**17.4%**
20%	$93,000	$38,000	-4.0%	17.4%
Franchise Fee				
2%	$101,000	$43,000	11.1%	20.0%
4%	**$93,000**	**$38,000**	**5.6%**	**17.4%**
10%	$70,000	$21,000	-12.3%	10.2%
Occupancy Fee				
$0	$94,000	$38,000	6.4%	17.8%
$1,000	**$93,000**	**$38,000**	**5.6%**	**17.4%**
$5,000	$89,000	$35,000	2.4%	16.0%

1/ Values in bold represent baseline conditions
2/ The sensitivity analysis shows variation in key parameters holding all other parameters at baseline levels
3/ Values represent change in annual visitation levels
4/ No seasonal variation in rates was evaluated

7.4.2 Variation in Capital Cost Estimates

Table 7-16 presents changes in financial metrics based on variations in capital costs (for the marina only). Based on the ROI and IRR, the break-even point (ROI = zero, IRR = 15%) is roughly $6.98 million.

Table 7-16. Sensitivity Analysis of Financial Feasibility for Marina Services (Capital Costs Only) [1,2]

Capital Cost Estimate	EBITDA (Annual Average)	Net Profit (Annual Average)	ROI	IRR
$4,000,000	$1,284,000	$244,000	15.2%	24.7%
$4,732,505	**$1,284,000**	**$212,000**	**10.6%**	**21.8%**
$6,000,000	$1,284,000	$158,000	4.3%	17.8%
$8,000,000	$1,284,000	$62,000	-4.5%	12.3%
$10,000,000	$1,284,000	-$56,000	-11.9%	7.9%

1/ Values in bold represent baseline conditions

2/ The sensitivity analysis shows variation in key parameters holding all other parameters at baseline levels

Chapter 8
Summary and Recommendations

8.1 Summary of Information

New Melones Lake is a popular recreation destination in the Sierra Nevada foothills, with use levels averaging over 700,000 visitors annually. With recreation playing such a large role in the management of the reservoir and adjacent lands, the role of commercial services is an important planning issue that has been identified in the New Melones Lake RMP/EIS. The goal of this CSS/FEE has been to clearly define the various types of commercial services that are necessary and appropriate for the reservoir based on a systematic review of recreation supply and demand in the region, as well as the site-specific characteristics of the lake. In addition, this study evaluates the financial feasibility of prospective commercial services, focusing on services provided under concessions contracts.

8.2 Recommendations for Commercial Services at New Melones Lake

8.2.1 Existing Commercial Services

There is strong demand for marina services at New Melones Lake. However, the existing marina is located in an area susceptible to storm-related damages. Further, an engineering review of the existing marina indicates that many facilities are nearing the end of their useful life. Accordingly, it is recommended that the existing marina facilities be closed and removed from the lake. It is further recommended that new marina facilities be developed to replace existing facilities.

8.2.2 New Commercial Services

There are a wide range of commercial services recommended at New Melones Lake. These services can be organized into two categories – concessions and services authorized under special-use permits. It is recommended that the following services be provided under concessions contracts: (1) marina services (including mooring and berth rentals, houseboat rentals, other motorized watercraft rentals, dry boat storage, boat repair, and prepared food service); (2) RV Park; and (3) an equestrian riding stable. In addition, it is recommended that the following uses be managed under special use permits: (1) whitewater rafting and (2) fishing guide services. As described in Chapter 3 and Chapter 4, there is a demonstrated demand for these commercial services at New Melones Lake. In addition, the concessions listed above have been subject to a comprehensive

financial feasibility evaluation, which, based on planning-level estimates, indicates that each of these concessions is financially viable over the long run.

8.2.3 Location of Commercial Services

The location of proposed commercial services has been considered at a planning level. Chapter 5 presents a general review of resource opportunities and constraints throughout the New Melones Lake planning area in an effort to show areas that are suitable (or not suitable) for future development of commercial services; however, this analysis does not consider a number of important factors, such as the location of cultural resources, It is recommended that the marina be relocated to a more conducive area on the lake, but should remain in one of the developed recreation areas, Glory Hole Recreation Area or Tuttletown Recreation Area. The exact location of the marina will be dependent on a number of physical factors, which were outside the purview of this study. It is recommended that a comprehensive analysis of marina location be prepared to determine the optimal location of marina facilities. The proposed location of the RV Park is in the Tuttletown Recreation Area. This location was originally envisioned for RV facilities in the 1976 Master Plan and represents a centralized location that experiences high use levels and already offered camping opportunities. Finally, it is recommended that the equestrian riding stable be located in the Peoria WMA. This location is considered most suitable based on the potential to integrate the riding stable with the proposed equestrian staging area planned at the Peoria WMA.

8.2.4 Seasonal Considerations

The length of the operating season for proposed commercial services is an important management issue. It also has a direct bearing on the financial performance of commercial operations. New Melones Lake experiences high visitation levels, which are concentrated in the peak summer months (approximately 62 percent to total annual visitation). However, there still remains substantial visitation during the off-season, with visitors likely participating in different set of recreation activities. Accordingly, it is recommended that the proposed marina and RV Park be operated on a year-round basis to provide maximum level of service to the entire visitor base. This recommendation is further supported by the financial feasibility evaluation. However, flexibility should be provided to prospective concessionaires operating these facilities to adjust services provided and hours of operation to better match services to demand levels. For the equestrian riding stable, the demand for horseback riding rentals would likely be very low during the off-peak periods, thereby suggesting that these services be provided on a seasonal basis. It is recommended that prospective concessionaires be provided the option for seasonal operation of the equestrian riding stable. For services provided under special use permit, such as whitewater rafting and fishing guides, these opportunities should be considered on a case-by-case basis.

8.2.5 Management of Commercial Services

The management of commercial services follows two paths. First, the decision must be made to manage prospective commercial services under concessions contracts or special use permits. It is recommended that services requiring substantial capital investment, including all marina services, RV Park, and equestrian riding stable be managed under concessions contract, while whitewater rafting and fishing guide services continue to be managed under special use permits. Second, there is the issue of whether Reclamation should manage commercial services at the lake. Because Reclamation is responsible for management of recreation at the lake, it is recommended that they continue to be responsible for management of related commercial services that support recreation at the lake. If recreation management is transferred at some point in the future to a managing partner, such as California State Parks, BLM or local counties, then the management role for commercial services should be re-evaluated.

Chapter 9 References

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Appendix A
Reclamation Guidance on Concessions Management

- Reclamation Manual Policy LND P02 (Concessions Management)
- Reclamation Manual Directives and Standards LND 04-01 (Concessions Management by Reclamation)
- LND 04-02 (Concessions Management by Non-Federal Partners

Reclamation Manual

Policy

Subject: Concessions Management

Purpose: Sets forth the policy for planning, development, management, and operation of concessions at Reclamation projects.

Authority: Reclamation Act of 1902, as amended and supplemented; the Reclamation Project Act of 1939; and the Federal Water Project Recreation Act of 1965, as amended.

Contact: Land, Recreation, and Cultural Resources Office, D-5300

1. **Concessions Management Policy.**

   A. **Stewardship.** Reclamation and its managing partners will ensure that concessions are planned, developed, and managed to meet public needs, are compatible with the natural and cultural resources, and provide a variety of services which are consistent with authorized project purposes.

   B. **Authorization of Concessions.** Based on the principles contained in this policy, Reclamation will authorize concessions which establish or continue to provide necessary and appropriate facilities and services.

2. **Definition.**

   A. **Concession.** A concession is a non-Federal commercial business that supports appropriate public recreation uses and provides facilities, goods, or services for which revenues are collected. A concession involves the use of the Federal estate and usually involves the development of real property improvements.

3. **Concessions Principles.** The following principles guide the planning, development, and management of concessions:

   A. Concessions will provide quality recreation facilities and services accessible to persons with disabilities, and appropriate visitor goods and services at reasonable rates.

   B. Concession operations will provide for the protection, conservation, and preservation of natural, historical, and cultural resources.

   C. Commercial facilities and services will be planned and developed through a commercial services planning and public involvement process, in cooperation with other public agencies.

D. Concessionaires will be provided with opportunities for a reasonable profit and may be compensated for Reclamation-approved improvements that will remain the property of the United States.

E. Reclamation will ensure fair competition in the awarding of concessions contracts and will not allow preferential rights of renewal.

F. Exclusive use of the Federal estate will not be allowed and existing exclusive use will be removed as soon as possible.

G. Concessions will comply with applicable Federal, State, and local laws.

4. **Supporting Directives and Standards and Guidelines.** Implementation of the Concessions Management Policy is accomplished through the use of the Reclamation Manual Directives and Standards, and Guidelines.

- Concessions Management by the Bureau of Reclamation, LND 04-01.
- Concessions Management by Non-Federal Partners, LND 04-02.
- Concessions Management Guidelines.

Reclamation Manual

Directives and Standards

Subject: Concessions Management by Reclamation[1]

Purpose: Sets forth the directives and standards for planning, development, and management of concessions at Reclamation projects.

Authority: Reclamation Act of 1902, as amended and supplemented; the Reclamation Project Act of 1939; and the Federal Water Project Recreation Act of 1965, as amended.

Contact: Land, Recreation, and Cultural Resources Office, D-5300

1. **Definitions.**

   A. **Concession.** A concession is a non-Federal commercial business that supports appropriate public recreation uses and provides facilities, goods, or services for which revenues are collected. A concession involves the use of the Federal estate and usually involves the development of real property improvements.

   B. **Cooperating Association.** A cooperating association is a nonprofit organization. It is a Federal 501(c) tax-exempt entity incorporated within the State in which it operates, and it is governed by a volunteer board of directors. Cooperating associations assist in enhancing interpretive programs, providing visitor information, funding research, and supporting various resource themes.

   C. **Exclusive Use.** Exclusive use is any use that excludes other appropriate public recreation use or users for extended periods of time. Exclusive use includes, but is not limited to, boat docks, cabins, trailers, manufactured or mobile homes, structures, roads, or other amenities that are determined by Reclamation to be exclusive use.

   D. **Federal Estate.** The Federal land and water areas under the primary jurisdiction of the Department of the Interior, Bureau of Reclamation.

   E. **Fixed Assets.** Fixed assets are any structures, fixtures, or capital improvements permanently attached to the Federal estate.

   F. **Improvement.** An addition to real property that increases its value or utility or that enhances its appearance.

[1] The following directives and standards apply to concessions managed directly by Reclamation. Separate directives and standards address concessions managed by non-Federal partners.

G. **Incidental Revenues.** Incidental revenues are generally defined as those revenues generated from the use of Reclamation's project lands and facilities that are incidental to authorized project purposes. Although recreation and concession facilities are authorized project purposes, it has been determined that revenues generated from the use of the Federal estate by concessionaires are to be credited as incidental revenues.

H. **Total Benefits to the Government.** Total benefits include:

(1) **Direct Returns.** These are revenues generated by authorized concession contracts and paid directly to the United States Treasury and credited in accordance with Reclamation Manual (RM), *Crediting of Incidental Revenues*, PEC 03-01.

(2) **Direct Benefits.** These are fees paid into a contractually designated special account for resource and capital improvements that directly benefit the public in the area of operations where the fees are collected.

(3) **Indirect Benefits.** These are services performed by the concessionaire that benefit the public or improvements made to the Federal estate by the concessionaire.

2. **Existing Concession Contracts.**

A. **Compliance.** Existing concession contracts must be brought into compliance with the Concessions Management Policy and Directives and Standards at the first legal opportunity, for example, if the contract is amended. If a concession contract expires or is terminated because of contract default or for other reasons, any subsequent concession contract must comply with the Concessions Policy and Directives and Standards.

B. **Unusual Circumstances.** In the event that unusual circumstances prevent Reclamation from issuing a new contract in a timely manner, a one-time, temporary contract may be issued. The temporary contract must comply with the Concessions Management Policy and Directives and Standards and may be issued for a period not to exceed 2 years.

3. **Concessions Planning.**

A. **General.** Before issuing a concession prospectus and Request for Proposal (RFP), Reclamation will complete a formal commercial services plan and financial feasibility evaluation.

(1) **Commercial Services Plan.** The commercial services plan can be an addendum to a resource management plan or similar planning document. If there is no other planning document, the commercial services plan may stand on its own. At a minimum, the commercial services plan must determine the number of concessions necessary to meet the public needs, the type of facilities and services to be provided, the financial feasibility of the concession(s), and the location(s) appropriate for commercial activities. The complexity of commercial services plans will vary according to location, past visitor use, anticipated revenues, and other factors.

(2) **Financial Feasiblity Evaluation.** The financial feasibility evaluation, included in the commercial services plan, will include, at a minimum, a documented determination of the financial viability of the proposed concession operation, including, the estimated fees to be returned to the Government, a justification for the proposed length of the term of the concession contract and the underlying assumptions regarding concessionaire capital investment in the concession.

(3) **Planning for New Concessions Contracts.** It is essential that area and regional offices allow adequate time to complete the commercial services planning process, develop an RFP and contract, and receive the Commissioner's Office review and approval of the RFP and contract. In some cases, the planning for new concession contracts(s) must begin several years in advance of the date anticipated the contract(s) will be awarded.

B. **Commercial Services Plan.** Decisions to contract for concessions must be based on the results of the commercial services planning process, which will include public involvement, financial feasibility evaluation, and environmental analysis. During the planning process, the following criteria will be applied to determine appropriate facilities and services:

(1) Facilities and services must be necessary and appropriate for a broad spectrum of public use and enjoyment.

(2) Commercial facilities must not be developed or expanded on the Federal estate if existing facilities, on or off the Federal estate, adequately meet current and projected needs.

(3) Facilities and services must reflect the general public's needs rather than the desires of a particular individual or group. Existing concessionaires may provide input through the public involvement process.

(4) The financial feasibility evaluation must consider the concession's:

(a) Gross revenues (receipts) by operating department (lodging, food, and beverage).

(b) Operating expenses:

(i) Direct expenses by operating department (including labor and cost-of-goods sold).

(ii) Unallocated expenses (including utilities and repair and maintenance).

(iii) General and administrative expenses (including overhead, officer salaries, office supplies, and travel).

(iv) Fixed expenses (including rent, interest, depreciation, and reserve accounts).

(v) Franchise fees.

(c) Earnings before interest, depreciation, taxes, and amortization. (EBIDTA is a standard accounting value representing net operating income)

(d) Capital investment costs:

(i) Working capital.

(ii) Furniture, fixtures, and equipment.

(iii) Ongoing capital replacement.

(iv) New facility development costs.

(e) Cash flow analysis.

(f) Other appropriate factors that influence the concession's business opportunity (including length of season, rates, visitation, inflation, cost of capital, and appropriate target rate-of-return to concessionaire).

(5) Facilities and services must be compatible with Reclamation project purposes.

(6) Facilities, services, or sites considered to be exclusive use will not be allowed and should not be considered as a part of any commercial services planning alternative. Existing exclusive use facilities, services, and sites must be removed when a contract expires or, if possible, sooner.

(7) Potential impacts to natural and cultural resources must be considered in the development of facilities and services.

(8) Facilities must be harmonious in form, line, color, and texture with the surrounding landscape.

(9) The planning process will consider whether existing concession facilities should be relocated because: (a) they would serve the public better at a different location, (b) they are situated in an area that is topographically limited (steep slopes, soils subject to erosion, limited space for expansion, or the site cannot accommodate the demand) and cannot provide the best public services and facilities, or (c) the financial feasibility evaluation determines that combining one or more existing concessions would create a more financially stable concession.

(10) If existing fixed assets are proposed to be retained as a part of any new concession operation, they must first be formally evaluated to determine if their existing condition and useful life is sufficient to last through the duration of any new contract. If the evaluation determines that any fixed asset would have to have significant maintenance or would need to be replaced during the term of the new contract, then the fixed asset must be removed prior to issuing a new contract.

(11) Concession contracts and operations must comply with all applicable laws, rules, regulations, Executive Orders, and policies.

4. **Concessions Contracting.**

A. **General Application.** These directives and standards will apply to existing concessions contracts only if agreed to by both Reclamation and the concessionaire. Existing contracts may not be renewed, nor can the length of the term be extended. Existing contracts that are amended or modified within the current term must adhere to these Concessions Management Directives and Standards. New or replacement contracts will be awarded on a fully competitive basis.

B. **Request for Proposals (RFP).** An RFP will be issued to actively solicit offers from interested parties. To allow for a wide distribution, the RFP will be published in the appropriate media and the following approach will be applied:

(1) **Fair Competition.** To ensure fair competition before and during the RFP process, meetings to discuss the RFP with existing or potential concessionaires or other outside parties must not be conducted. It is appropriate to have meetings with existing concessionaires to deal with ongoing operational or

contractual issues and programs. The RFP should include a schedule of meetings in which all interested parties can discuss requirements of the RFP. Other meetings requested by individual interested parties must be declined.

(2) **Equal Access to Information.** All information must be equally available to all interested parties during the RFP process.

(3) **Written Explanation.** Following release of an RFP, explanations or clarifications will be provided only in writing and must be sent to all parties who already have received the RFP and to any parties who are to receive it in the future.

(4) **Existing Concessionaires.** Existing concessionaires must respond to the RFP as a bidder to be considered for the new contract. If any existing concessionaire has a contract that includes a "Preferential Right of Renewal," the RFP must state that, if selected, the concessionaire's contract will be subject to all terms and conditions as outlined in the RFP. The RFP must also state how the preferential right of renewal will be applied in the bid process. No preferential right of renewal will be authorized for new, modified, or amended concession contracts.

C. **Review of Proposals.** A panel composed of Reclamation "subject matter experts" (e.g., financial, recreation, and concession experts) will be convened to review submitted proposals. If Reclamation desires, it may contract with external experts to analyze offers. The panel will forward a recommendation to the selecting official. The selecting official will provide selection criteria and a crediting plan to the panel.

D. **Contract Terms and Conditions.** The following items should be specifically addressed in concession contracts:

(1) **Standard Contract Language.** Reclamation's standard concession contract language will be used to ensure compliance with all applicable laws, rules, regulations, Executive Orders, and Concessions Management Policy and Directives and Standards. Standard contract language can be found in the Concessions Management Guidelines. (See paragraph 5E.)

(2) **Interim Operator.** Reclamation may select an interim operator if a contract is not in place at the time the existing contract expires or is terminated. Interim contracts will generally follow the existing contract provisions; however, contract terms and conditions must be modified to reflect current policies and directives and standards. Reclamation may select the existing concessionaire as the interim operator if the existing concessionaire is performing in a

satisfactory manner. The interim operation will not exceed 2 years. A new contract must be awarded as expeditiously as possible.

(3) **Required and Authorized Visitor Services.** Contracts must outline the specific types of services, facilities, and activities that a concessionaire is REQUIRED to offer. The contract should also specify any other services or activities the concessionaire is AUTHORIZED to offer. It must be clear that those required services are not optional and must be provided. Any service, facility, or activity not identified in either category is not authorized without a contract amendment or written authorization from the contracting official (Regional Director or delegate).

(4) **Sale and Transfer.** Concessionaires or parties holding interests in a concession contract may not sell, assign, or transfer their interests or a part of their interests to another party without the prior written approval of the contracting official (Regional Director or delegate). Concessionaires must complete and submit all sale and transfer information as required by Reclamation before approval of a sale or transfer of all or any portion of a concession operation will be considered.

(a) **Proposed Transfer.** A proposed transfer of interest is subject to the same evaluation process that is performed for a new concession contract. The Reclamation-designated official may choose not to approve a proposed sale or transfer or may choose to place conditions on the approval.

(b) **Change of Original Contract Terms.** Concession contracts will provide that the terms and conditions are subject to change by Reclamation before approval of a sale or transfer. The length of the term may be reduced but not extended.

(5) **Default and Nonperformance.** Clauses addressing default, penalty, and termination will be included in all concession contracts. The review and evaluation process will be critical to help determine if a concessionaire is in default or not meeting the terms of the contract. [See paragraph 4D(27).] The contract will also allow Reclamation to require a surety or performance bond at any time, collect penalties and administrative costs for default and nonperformance, and terminate the contract.

(6) **Length of Term.** The term of all contracts will be limited to the shortest period practical and will be based primarily on the investment required of the concessionaire, as determined through the financial feasibility evaluation. The term of a contract requiring minimal or no new capital investment should generally not exceed 5 years. When substantial investment is required, the

term will be based on the financial feasibility evaluation to ensure that concessionaires receive a reasonable return on their investment. New contracts cannot contain renewal clauses.

(7) **Subconcessions.** Subconcessions are not permitted.

(8) **Concessions Building and Improvement Program.** All designs for construction must be approved by Reclamation and must comply with applicable environmental regulations and building code requirements, including those for accessibility and historic preservation. In areas where State or local construction standards are not available, Reclamation may provide appropriate standards. Where required and before construction, the concessionaire must obtain all required building permits from the local authorities. All the concessionaires' facilities will be harmonious in form, line, color, and texture with the surrounding landscape.

(9) **Environmental Compliance.** Concession contracts will address all activities with potential environmental impacts resulting from the release of hazardous materials to the environment including, but not limited to, the following: pesticides, herbicides, sewage effluents, petroleum products, and liquid waste (gray water). Concessionaires are required to follow all applicable Federal, State, and local laws, rules, and regulations related to hazardous substance use, storage, and disposal. Application for and acquisition of all required certifications and permits are the responsibility of the concessionaire.

(10) **Interpretation and Thematic Programs.** Contracts should require concessionaires, to the extent possible, to support Reclamation's educational efforts through such actions as developing interpretive and area thematic messages in printed material (menus, marketing, correspondence, etc.), using outdoor signs, and, as appropriate, developing formal programs.

(11) **Operation and Maintenance Plan.** Concessionaires will prepare an annual operation and maintenance plan, which must be approved by Reclamation. Concession contracts must clearly state what the plan will contain. Reclamation's Concessions Management Guidelines provide a list of operation and maintenance items that should be considered for inclusion in the plan. (See paragraph 5E.)

(12) **Preference for Renewal.** Concession contracts will not include a preference right of renewal.

(13) **Reimbursement for Fixed Assets Constructed by Concessionaires.** Concession contracts will specify whether fixed assets located on the Federal

estate by a concessionaire will remain on the Federal estate or be removed at the end of the contract.

(a) **Assets That Remain With the United States.** Title to all capital investments will be held by the United States and not the concessionaire. Concessionaires do not automatically have a right to compensation from the United States in fixed asset improvements upon contract expiration or termination. However, at the option of Reclamation, and when appropriated funds are available, Reclamation may purchase a concessionaires remaining assets that have not been amortized and the amount paid to the concessionaire will not exceed cost less depreciation.

(b) **Approval of Improvements.** Any new investment in fixed asset improvements by the concessionaire must be approved, in writing, by Reclamation before commencement of construction. This written approval will specify (i) the amount of money to be spent to construct or rehabilitate the fixed asset, (ii) the allowed depreciable life of the improvement (according to the IRS schedule), and (iii) the construction details and schedule.

(c) **Assets That Remain to be Purchased by a New Concessionaire**. Upon expiration, termination, or sale or transfer of a concession contract some fixed assets may not have been fully amortized. If Reclamation determines the fixed assets are still needed for the concession operation, the unamortized value must be purchased by the new concessionaire and based on the original cost less depreciation.

(14) **Area of Operation.** Each contract will authorize and define only the physical area necessary to conduct the business activities allowed by the contract. The contract must include a legal description and a detailed map. Concession boundaries will be surveyed by Reclamation and must be easy to recognize by the visiting public.

(15) **Additional Facilities or Services.** A concessionaire may request contract amendments for limited additional facilities or services that meet public needs and were not identified in the RFP. A major expansion of facilities or services is not permitted. Additional facilities or services are not allowed without advance approval by Reclamation.

(16) **Total Benefits to the Government.** Reclamation will determine and recover fair compensation, including direct returns and direct and indirect benefits, for the use, rights, and privileges granted under a concession contract. The

concession contract will specify the direct returns and direct and indirect benefits.

(a) **Thresholds.** Targeted thresholds of total benefits will be developed to determine the optimal combination of payments. These will be used in advertisements, RFPs, and renegotiations to seek appropriate benefits to the Government and the public.

(b) **Direct Returns (Disposition of Fees).** The appropriate disposition of recreation or concession fees depends on the land status and authority used to collect the fees. Fees collected under the authority of the Land and Water Conservation Fund Act are to be deposited in the Recreation, Entrance, and User Fee Account, which is a special account for Reclamation established in the United States Treasury. For specific information, refer to the RM, *Crediting of Incidental Revenues*, PEC 03-01. Except as provided otherwise in a project specific authorization, fees collected pursuant to Reclamation law will be disposed of as follows:

(i) Fees generated by concessions or recreation activities on withdrawn project lands are deposited in the Reclamation Fund.

(ii) Fees generated by concessions or recreation activities on lands acquired for project purposes are deposited in the Reclamation Fund, to the credit of the project.

(17) **Utility Services Provided by Reclamation.** The value for utility services provided by Reclamation will be based on the recovery of full operating and replacement costs for utility capital investments and comparable utility rates. If the financial feasibility evaluation determines that it would not be feasible for the concessionaire to pay rates which would compensate Reclamation for its total capital and operating costs, Reclamation must determine the utility service rates that would be feasible and applied. Utility services include, but are not limited to, electricity, power, water, waste disposal, gas, and communication systems.

(18) **Exclusive Use.** Exclusive use facilities are not authorized in new concession contracts. If existing concession contracts are amended, a new provision must be included that requires exclusive use to be phased out as soon as possible, before the contract expires. A mandatory timetable for this phase out must be included in the amended contract. The concessionaire and a person hired to guard the concessionaire's investment may reside on the Federal estate, with the written approval of the contracting officer.

(19) **Sale of Personal Property.** The sale of personal property by anyone other than the concessionaire is prohibited on the Federal estate. Concessionaires will be permitted to sell their personal property on the Federal estate only to Reclamation or a succeeding concessionaire.

(20) **Rates and Merchandise.** Rates charged by concessionaires for all facilities, services, and merchandise will be based on charges for comparable facilities, services, facilities, and merchandise provided by the private sector in similar situations. Approved rates will ensure a fair return to the concessionaire and a reasonable charge to the public. Reclamation will approve such rates or rate schedules when the concessionaire proposes to change rates. Any rates in excess of comparable rates must be thoroughly justified and supported in writing by the concessionaire and approved by Reclamation.

(21) **Concessions Safety Program.** Concessionaires are responsible for providing and ensuring a safe and healthful environment for both the visiting public and employees by developing, implementing, and administering health, safety, and educational programs to ensure that concession areas are managed in compliance with Federal, State, and local laws, rules, and regulations.

(22) **Insurance Program.** Concessionaires must have an insurance policy that will indemnify the United States and meet applicable State requirements. All liability policies will provide that the insurance company will have no right of subrogation against the United States and will provide that the United States is named as an additional insured. Reclamation must be provided with a certificate of insurance by the insurance agent to confirm that the above requirements are met before development begins or operations commence. The concessionaire must also provide Reclamation with a copy of each insurance renewal certificate throughout the term of the concession contract. The Regional Director or delegate will establish a minimum insurance requirement based on the facilities and services offered by individual concessions.

(23) **System of Recordkeeping.** Concessionaires will complete Reclamation's Annual Financial Report (AFR) form and provide any other financial information that may be requested. The annual financial reports will conform to the standard AFR form, without exception or modification.

(24) **Food Sanitation.** Concessionaires' food services will comply with Federal, State, and local food handling and sanitation laws, rules, and regulations.

(25) **Advertising and Signs.** Use of the Reclamation seal, logo, or name must be approved by Reclamation before it is displayed in advertisements or on signs.

Outdoor signs or other forms of advertising must not be displayed on the Federal estate without the approval of Reclamation.

(a) The Reclamation logo or name will be obvious at all entrances to all concessions.

(b) Concessionaires will be required to notify the public that they are authorized by Reclamation to conduct business on the Federal estate. All promotional material, regardless of media format (i.e., printed, electronic, broadcast), provided to the public by the concessionaire in connection with the services provided under the concession contract must be approved in writing by Reclamation. At a minimum, all such information will identify the concessionaire as an authorized concessionaire of the Bureau of Reclamation, Department of the Interior.

(26) **Statistical Data.** Concessionaires will furnish information as specified in Reclamation's Recreation Use Data Report on an annual basis or as otherwise requested.

(27) **Concessions Review and Evaluation.** Reclamation's Concessions Management Guidelines contain instructions on how to determine an appropriate rating and how to ensure that the concessionaire is in compliance with the terms of the contract. There are two types of review, the "local review" and the "external review."

(a) **Local Review.** The local review will be conducted by the Reclamation office directly responsible for oversight of the concession. The local review will be conducted at least twice annually. One of the inspections must be conducted during the high use season. The combined reviews will determine the annual performance rating. The review will include, at a minimum, items listed in the Concessions Management Guidelines. The possible ratings are Satisfactory, Marginal, or Unsatisfactory. A copy of the completed review and rating will be sent to the regional office and the concessionaire and entered into the Recreation Use Data Report. The local Reclamation office will maintain all concession program management files and records.

(b) **External Review.** The external review will be conducted and documented by a team of technical specialists who are not employees of the office directly responsible for oversight of the concessions. At a minimum, contracts with a term of 5 years or less will be reviewed once, midterm; contracts with a term exceeding 5 years will be reviewed every 5 years.

A copy of the review will be sent to the area and regional offices and the concessionaire. The external reviews will examine, at a minimum:

(i) The extent to which the concession operation meets Reclamation's Concessions Management Policy, Concessions Management Directives and Standards, and Concessions Management Guidelines.

(ii) The extent to which the concession activities are consistent with resource management plans and commercial services plans.

(iii) The extent to which the concessionaire is in compliance with the contract provisions, especially with respect to building improvements, operations, prices charged by concessionaires, fees returned to the Government, and annual financial reporting to Reclamation.

(iv) The quality and condition of the facilities and services related to the health and safety of the employees and the visiting public.

(v) The recordkeeping system(s) used by the local Reclamation office to determine that the concessionaire uses generally accepted accounting practices.

(vi) The recordkeeping system(s) used by the local Reclamation office to conduct quarterly and annual reviews.

(vii) The local Reclamation office records regarding the annual reviews and annual rating.

(c) **Corrective Actions.** If either the local or external review identifies operational or administrative deficiencies in the operation of a concession, a timetable must be established by the area office and approved by the Regional Director or delegate to correct these deficiencies. The contract must specify the actions that will be taken for marginal or unsatisfactory ratings. The possible actions will include suspension of all or part of the concession operation or termination of the concessions contract.

(d) **Disputes.** Disputes between Reclamation and the concessionaire are to be resolved through informal negotiations and discussions. In the event that such disputes fail to reach resolution, either party may request a formal, nonbinding arbitration process. Each party selects one member for the arbitration panel and, together, these two members will select the third (neutral) panel member. The panel will treat each party equally and

fairly. Recommendations must be made by a majority of the panel members. If either party disagrees with the arbiter's recommendation, he or she may file an appeal with the Secretary of the Interior under 43 CFR, Part 4, Subpart G. The Secretary's determination is final and binding.

(e) **Officials Not to Benefit.** No member of the executive, legislative, or judicial branches of the Federal Government may be a party to any concession contract or receive any benefits from a concessions contract.

5. **Miscellaneous.**

A. **RFP and Contract Review.** All RFPs and concession contracts must be reviewed and approved by the Commissioner's Office. The following sequence of steps must be followed:

(1) Area or regional offices must submit the proposed RFP and contract along with supporting information to the Commissioners's Office. The supporting information must include appropriate planning documentation and financial feasibility evaluation.

(2) The Commissioner's Office will establish a review team appropriately suited to the complexity and scope of the RFP and the contract. The team will evaluate the RFP and the contract for sufficiency and compliance with the Concessions Management Policy and Concessions Management Directives and Standards.

(3) The Commissioner's Office will return the approved RFP and contract, or return the RFP and the contract for modification and resubmittal if necessary.

B. **Training.** All Reclamation offices are responsible for ensuring that Reclamation personnel involved with concessions have received training commensurate with their responsibilities.

C. **Nonprofit Organizations.**

(1) In certain circumstances, it may be appropriate for cooperative associations or nonprofit organizations to sell goods or provide visitor services to meet Reclamation's goals and objectives. All cooperative association arrangements must be approved by Reclamation if the cooperative associations operate within a concession.

(2) The cooperative association will be responsible for maintaining its accounting system, and the system cannot be combined with the annual financial report submitted by a concessionaire. Nonprofit organizations will also be given very

clear allowances and restrictions identifying the type of business they are authorized to conduct and the type of goods or services they may provide. Just as with concessionaires, nonprofit organizations are prohibited from providing items or services not specifically authorized. All nonprofit organizations must provide written proof of their nonprofit status.

D. **Employment of Reclamation Personnel or Family Members[2].** Reclamation employees or family members(s) may not be owners, partners, board members, corporate officers, general managers, or employees of any business providing commercial services on the Federal estate, nor may they have any financial interest in such a company. Ownership of stock shares traded in a recognized open market is not considered a financial interest under these directives and standards. Reclamation employees are further prohibited from using their public office for private or family gain. A Reclamation employee involved in activities concerning preparing specification formulation, contract award, or operational administering a concession may not participate in that activity if the employee or a family member is involved in any phase or operation of that concession. Any Reclamation employee responsible for any phase of a concession contract will be excused from duties related to the contract if the employee or a family member is involved in the competition for the contract or the Reclamation employee or a family member may benefit financially from the award of the contract.

E. **Concessions Management Guidelines.** The Concessions Management Guidelines contain additional information that will assist Reclamation offices in complying with the Concessions Management Policy and the Concessions Management Directives and Standards.

[2] Guidance on this issue should be obtained from an ethics counselor in the servicing Reclamation Personnel/Human Resources Office.

Reclamation Manual

Directives and Standards

Subject: Concessions Management by Non-Federal Partners

Purpose: Establishes minimum approval standards for all new, modified, or renewed non-Federal concession contracts.

Authority: Reclamation Act of 1902, as amended and supplemented; the Reclamation Project Act of 1939; and the Federal Water Project Recreation Act of 1965, as amended.

Contact: Land, Recreation, and Cultural Resources Office, D-5300

1. **Non-Federal Partners.** Reclamation may transfer to non-Federal partners the responsibility to develop and manage public recreation areas and concession services. Transferred areas are managed by a partner under Federal authorities, the partner's authorities, specific contracts, and agreements with Reclamation. Well-planned and -managed concessions on the Federal estate are of mutual interest to Reclamation and its partners. Reclamation is responsible for continuous management oversight of managing partners and their concessions operations.

2. **Compliance With Directives and Standards.** New concession contracts issued by managing partners must comply with these directives and standards. Existing concession contracts issued by managing partners must, at the first opportunity, be brought into compliance with these directives and standards. If a concession contract is amended or terminated because of contract default or for other reasons and a subsequent concession contract is issued by the non-Federal partner, the subsequent concession contract must be in compliance with these directives and standards.

3. **Definitions.**

   A. **Concession.** A concession is a non-Federal commercial business that supports appropriate public recreation uses and provides facilities, goods, or services for which revenues are collected. A concession involves the use of the Federal estate and usually involves the development of real property improvements.

   B. **Exclusive Use.** Exclusive use is any use that excludes other appropriate public recreation use or users for extended periods of time. Exclusive use includes, but is not limited to, boat docks, cabins, trailers, manufactured or mobile homes, structures, or amenities that are determined by Reclamation to be exclusive use.

   C. **Federal Estate.** The Federal land and water areas under the primary jurisdiction of the Department of the Interior, Bureau of Reclamation.

D. **Fixed Assets.** Fixed assets are any structures, fixtures, or capital improvements permanently attached to the Federal estate.

E. **Improvement.** An addition to real property that increases its value or utility or that enhances its appearance.

F. **Management Agreement.** A management agreement is a binding contract between Reclamation and a partner to provide public recreation opportunities and concession services on the Federal estate.

G. **Non-Federal Partner.** A non-Federal partner is a non-Federal public entity that manages recreation and other resources through a contractual agreement with Reclamation.

H. **Total Benefits to the Government.** Total benefits include:

(1) **Direct Returns.** These are fees generated by authorized concession contracts and paid directly to the managing entity or to the United States Treasury.

(2) **Direct Benefits.** These are fees paid into a contractually designated special account for resource and capital improvements that directly benefit the public in the area of operations where the fees are collected.

(3) **Indirect Benefits.** These are services performed by the concessionaire that benefit the public or improvements made to the Federal estate by the concessionaire.

4. **Managing Partner Agreements.**

A. **Third-Party Concession Agreements.** Third-party concession agreements are agreements between the non-Federal managing partner and another entity to provide concession related services and facilities.

(1) **Agreement Standards.** Any concession contract, including a contract renewal or modification, issued by the non-Federal managing partner must meet the requirements of these Concessions Management Directives and Standards.

(2) **Contract Approval.** Before issuing or renewing a non-Federal concession contract, the contract must be approved by Reclamation.

(3) **Stand In Stead Conditions.** All concession contracts must state that Reclamation will not stand in stead for the managing partner should the

management agreement expire or be terminated. At Reclamation's discretion, Reclamation may issue a new concession contract that is in compliance with Reclamation Manual (RM), *Concessions Management by Reclamation*, LND 04-01. Reclamation will not issue a new contract until all exclusive use has been removed.

B. **Review and Evaluation.** All management agreements will require Reclamation to conduct annual concession operation reviews and evaluations. Reclamation may also conduct unplanned reviews, as necessary. If a review identifies operational or administrative deficiencies in the operation of a concession, a timetable must be established by the area office to correct these deficiencies.

C. **Exclusive Use.** New, renewed, or modified management agreements and concession contracts will include clauses that prohibit new exclusive use and require that existing exclusive use be phased out. When existing concession contracts issued by the partner are modified or renewed, Reclamation and the partner must establish a timetable in the concession contract that phases out existing exclusive use before the expiration of the contract. This timetable must be established before the concession contract is resubmitted to Reclamation for approval. The concessionaire and a person hired to guard the concessionaires investment may reside on the Federal estate, with the written approval of Reclamation.

D. **Disposition of Fees.** Unless State or local laws direct how concession fees paid to the partner will be used, the following will apply: (1) fees will be returned to the area to provide for operation, maintenance, and replacement of recreation facilities and new facility development; (2) any excess fees (profit) will be returned to Reclamation and disposed of according to RM, *Crediting of Incidental Revenues*, PEC 03-01.

E. **Statistical Data.** Each year, the managing partner will be required to provide Reclamation with the information specified in Reclamation's Recreation Use Data Report. Other information may be required, as necessary. This information will provide an accurate inventory of facilities. The report will also contain other data about the managing partner's recreation and concession operations on the Federal estate.

5. **Concessions Planning.** Concession development will adhere to the concessions principles listed in RM, *Concessions Management* (LND P02), will be based on appropriate plans developed by the partner or Reclamation, and will be approved by the Regional Director or delegate. Reclamation can provide direction and assistance in the process, as necessary, to accomplish effective commercial services planning.

6. **Concessions Contracting.** The following items will be addressed in all new and renewed concessions contracts issued by non-Federal partners.

   A. **Sale and Transfer.** The sale and transfer of existing concessions must be approved according to the management agreement and reported to Reclamation in a timely manner.

   B. **Contract Language.** The partner will develop and use contract language that complies with all applicable Federal laws, rules, regulations, and Executive Orders. Reclamation can provide examples of standard contract structure and language.

   C. **Length of Term.** The term for a concession may not exceed the term of the management agreement between Reclamation and the partner. In general, terms should be as short as possible and based on the new investment required as determined by a financial feasibility evaluation.

   D. **Subconcessions.** All subconcessions must meet the terms and conditions of the prime concession contract. The partner must approve all subconcessions and notify Reclamation in advance of any authorization that needs Reclamation approval. Generally, subconcessions are discouraged in order to keep operations under single management.

   E. **Concessions Building and Improvement Program.** All designs and construction must comply with applicable Federal, State, and local environmental and historic preservation laws and regulations and building code requirements. In areas where no State or local construction standards exist, Reclamation may provide appropriate standards. Where required and before construction, building permits must be obtained from local authorities by the concessionaire. All facilities will be harmonious in form, line, color, and texture with the surrounding landscape.

   F. **Operation and Maintenance Plan.** Concessionaires will prepare an annual operation and maintenance plan, which must be approved by the partner. The concession contract must clearly state what the plan will contain. Reclamation can provide examples of such plans for the partner and the concessionaire.

G. **Reimbursement for Fixed Assets.**

(1) A right to reimbursement may exist when a concessionaire places Reclamation-approved fixed assets on the Federal estate. Title to fixed assets must be established in the concession contract. Reimbursement of a concessionaire for fixed assets is the responsibility of the partner. The method for determining the amount of reimbursement and the method of payment will be specifically addressed in the concession contract between the partner and the concessionaire.

(2) In the event the partner's agreement with Reclamation expires or is terminated without a commitment by both Reclamation and the partner to enter into another agreement, all the concessionaires' fixed assets and personal property must be removed from the Federal estate unless Reclamation decides to issue a new concessions contract and decides to retain the fixed assets. [See paragraph 4A(3).] The partner will be responsible for ensuring that the concession area is returned in a condition satisfactory to Reclamation.

(3) It must be clearly stated that no financial obligation or risk will reside in the Federal Government for reimbursement for fixed assets or personal property as a result of the partner awarding a concession contract. All new concession contracts issued by the partner will address rights for reimbursement to the concessionaire for fixed assets. Interests in a concessionaire's fixed assets may not extend beyond the term of the management agreement. In addition, the concession contract must provide appropriate language regarding interests in fixed assets and methods of reimbursement, if any, to the concessionaire by the partner.

H. **Area of Operation.** Each concession contract will authorize and define only the physical area necessary to conduct the business activities allowed by the contract. Concession boundaries must be surveyed by the partner and easily recognizable by the visiting public.

I. **Additional Facilities or Services.** Any proposal for expansion of facilities or services must be reviewed by Reclamation and approved by the partner before the expansion takes place.

J. **Exclusive Use.** The contract must state that no new facility, service, or site determined by Reclamation to be exclusive use will be allowed. New, renewed, or modified concession contracts issued by the partner will include clauses that establish a timetable for phasing out existing exclusive use before the contract expires.

K. **Reclamation Rights.** All concession contracts must be subject to the rights of Reclamation and its agents to use the subject lands and waters for project purposes.

L. **Termination of Concession Contract.** Concession contracts will acknowledge the right of Reclamation to terminate, for cause, any concession contract authorized by a non-Federal partner.

M. **Total Benefits.** The partner will establish and recover fair benefits, including direct return and direct and indirect benefits, for the uses, rights, and privileges granted by a concession contract. For disposition of fees, see paragraph 4D.

N. **Rates and Merchandise.** Rates charged by concessionaires for services, food, lodging, and merchandise will be based on charges for comparable facilities, services, and merchandise provided by the private sector in similar situations. The partner must approve the rates requested by concessionaires.

O. **Concessions Safety Program.** Concessionaires are responsible for providing and ensuring a safe and healthful environment for both the visiting public and employees by developing, implementing, and administering health, safety, and educational programs to ensure that concession areas are managed in compliance with Federal, State, and local laws, rules, and regulations.

P. **Environmental Compliance.** Concession contracts will address all activities with potential environmental impacts resulting from the release of hazardous materials to the environment including, but not limited to, the following: pesticides, herbicides, sewage effluents, petroleum products, and liquid waste (gray water). Concessionaires are required to follow all applicable Federal, State, and local laws, rules, and regulations related to hazardous substance use, storage, and disposal. Application for and acquisition of all required certifications and permits are the responsibility of the concessionaire.

Q. **Food Sanitation.** Concessionaires' food services will comply with Federal, State, and local food handling and sanitation regulations.

R. **Advertising and Signs.** The Reclamation logo or name, along with the non-Federal partner logo or name, will be displayed at all concession entrances used by the public. Outdoor signs or other forms of advertising on the Federal estate must be approved by Reclamation before they are displayed.

S. **Sale of Personal Property.** The sale of personal property other than the approved concessions inventory is prohibited on the Federal estate. No party will be permitted to sell personal property, including vehicles, manufactured or mobile

homes, house trailers, travel trailers, boats, or personal water craft, on the Federal estate.

T. **Utility Services Provided by Reclamation.** The fee charged for utility services provided by Reclamation will be based on the recovery of full operating and replacement costs for utility capital investments and comparable utility rates. Utility services include, but are not limited to, electricity, power, water, waste disposal, gas, and communication systems.

U. **Insurance Program.** Concessionaires must have and maintain an appropriate insurance policy that will indemnify the United States and meet applicable State requirements. All liability policies will provide that the insurance company will have no right of subrogation against the United States and must provide that the United States is named as an additional insured. The partner may establish similar requirements itself, but it must provide Reclamation with a copy of the insurance certificate that identifies the above conditions.

V. **System of Recordkeeping.** Financial reports and records necessary for management and oversight of concessions must be maintained and available to the partner and to Reclamation upon request. At a minimum, each concessionaire will complete Reclamation's Annual Financial Report form(s).

7. **Concessions Administration.**

A. **Annual Review and Evaluation.** All concession agreements issued by the non-Federal partner will require Reclamation and the non-Federal partner to conduct annual concession reviews and evaluations. The review should identify problems, solutions, and a timetable for resolving the problems in a written report. The non-Federal partner must ensure that any operational or administrative deficiencies noted by the review are corrected in accordance with the established timetable.

B. **Nonprofit Organizations.** In certain circumstances, it may be suitable for cooperative associations or nonprofit organizations to sell goods or provide visitor services to meet the goals and objectives of both Reclamation and the partner. These associations and organizations must be approved by the partner if the cooperating association operates within a concession or elsewhere on the Federal estate. The cooperating association will be responsible for maintaining its accounting system, and the system cannot be combined with a concessionaire's annual financial report. Nonprofit organizations will also be given very clear instructions identifying the type of business they are authorized to conduct and the types of goods and services they may provide. All organizations must provide written proof of their nonprofit status to Reclamation and the partner.

C. **Employment of Reclamation Personnel or Family Members**[1]. Reclamation employees or family members may not be owners, partners, board members, corporate officers, general managers, or employees of any business providing commercial services on the Federal estate, nor may they have any financial interest in such a company. Ownership of stock shares traded in a recognized open market is not considered a financial interest under these directives and standards. Reclamation employees are further prohibited from using their public office for private or family gain. A Reclamation employee involved in preparing specifications, awarding a contract, or administering a concession may not be involved in that activity if the employee or a family member is involved in any phase or operation of that concession. Any Reclamation employee or family member responsible for any phase of a concession contract will be excused from duties related to the concession contract if the employee or a family member is involved in competing for the contract or if the Reclamation employee may benefit financially from the awarding of the contract.

[1]Guidance on this issue should be obtained from an ethics counselor in the servicing Reclamation Personnel/Human Resources Office.

Appendix B
Engineering Review Technical Memorandum

Memorandum

Date: February 15, 2011 (Revision 1)

To: Jane Branson, URS

From: Russ Konig (URS), Shabad Khalsa (URS), Joseph Barnes

Subject: **New Melones Reservoir Marina - Condition Survey and Remediation Estimate**

This Memorandum documents a field condition assessment that was performed by URS for the existing marina at the New Melones Lake. After assessing the condition of the marina, URS also prepared an Opinions of Probable Cost (cost estimate) addressing the replacement of unusable components determined to have a remaining useful life of 5 years or less, and the cost of relocating useable components to another, more sheltered location on the lake. The cost to replace unusable components would be the approximate cost to refurbish the marina in its present location to begin another concession lease period. The replacement cost for unusable components added to the cost to relocate useable facilities would be the approximate cost for a marina at a different location on the lake to begin another concession period. Per the request of Duane Paul (Entrix), URS also prepared an Opinion of Probable Cost addressing the removal and replacement of all marina components, regardless of age or condition.

BACKGROUND

Existing recreational facilities at the New Melones Reservoir include a marina as part of the Glory Hole Recreational Area. The marina offers slip rentals, boat and houseboat rentals, refueling, sewage pump out, routine boat maintenance, boat towing, and convenience store. The marina is operated by a concessionaire under a lease agreement with the Bureau of Reclamation (Bureau) that is scheduled to expire in 2012. The Bureau is planning to advertise and enter into a new 30-year lease agreement with a concessionaire for the marina that would begin when the current lease expires. URS understands the new lease agreement could include an optional 10-year extension provision.

FIELD CONDITION ASSESSMENT

Russ Konig and Shabad Khalsa of URS completed the field useful life survey of the marina facilities located at the New Melones Reservoir having a physical address at 6503 Glory Hole Road, Angels Camp, California. The scope of the review included the floating components of the marina and the land based infrastructure directly supporting the floating components. The field assessment was conducted on February 4, 2010, and URS staff was accompanied by Dan Holsapple of the Bureau, a Ranger, and a representative of the current concessionaire. The field visit covered on-shore facilities and a boat tour of floating facilities. Weather conditions at the time of the field visit were overcast with rain showers in the afternoon. Figure 1 shows the location of the New Melones Reservoir and the location of the Marina on the lake. Note that a second site visit was made on November 3, 2010, in connection with alternative marina sites, but some of the land based infrastructure at the existing marina was also revisited and reevaluated for condition.

Based upon information shown on the New Melones Lake Marina Long Term Development Plans (LTDP) dated 4-2-09, there are 2 configurations for the marina, a winter layout and a summer layout. According to the concessionaire, the winter layout is necessary due to the high wave action and potential for damage during the inclement weather months. The marina layout observed during

the February 4, 2010 visit was the winter layout, as depicted on Drawing 5 of the LTDP. Referenced drawings are included in Annex B-1.

The URS team gathered information and photographs related to the major marina components. Based on discussions with the concessionaire, a large variable associated with a useful life estimate for the existing components (and future marinas) is the severity of winter storm damage due to wind and large waves. The marina location is not adequately protected at this time by either a land mass or wave attenuation of some sort to mitigate the damage to the docks or floating structures.

Table 1 summarizes the major marina components observed during the site visit, and provides the estimated remaining useful life that would be expected in a protected location. Figure 2 shows the location of each component. Protection could be provided by relocating the marina to a more protective cove or providing suitable wave attenuators. Without either action, the useful life estimates shown in the Table could be reduced significantly.

Table 1 - Condition Assessment Summary

Item	Description	Remaining Useful life	Reuse Potential
A	Marina Overview		
B	Marina Utility Shed	0	None
C	Covered Boat Dock - East	10	Low
D	Mooring Dock	20	High
E	Covered Boat Dock - Central	15	High
F	Houseboat Dock - West	20	High
G	House Boat Service Dock	5	Low
H	Marina Store	5	Low
I	Dock Attached to Marina Store	3	Very Low
J	Entrance Ramp	10	High
K	Gas Dock	0	None
L	Houseboat Anchorage	10	Medium
M	Land Based Infrastructure / Facilities	10	Low

Table 2 describes each component listed in Table 1 and provides background for the useful life estimate, and references the appropriate group of photographs. Photographs are included in Annex B-2.

Table 2 - Condition Assessment Detail

Item	Description	Comment
A	Existing Marina	
B	Marina Utility Shed	According to the concessionaire, the marina utility shed was damaged and dislodged from the main marina structure during recent winter storms. It was relocated to the east portion of the marina for storage. Based on observed conditions, this structure has no useful life remaining. Reference pictures B1 through B2
C	Covered Boat Dock - East	This covered dock is in fair condition. The dock is built upon exposed styrofoam floats which are showing some signs of deterioration. Useful life is estimated to be 10 years if expanded polystyrene foam (EPS) is allowed to remain.

		Assumption is made that exposed styrofoam floats will no longer be allowed and must be replaced. Based on this assumption, useful life estimated to be 0 years or a significant re-float effort may be required. Reference pictures C1 through C6.
D	Mooring Dock	The mooring dock is in very good condition and appears relatively new. The dock is supported by encapsulated EPS floats. Useful life is estimated to be at least 20 years. Reference pictures D1 through D4
E	Covered Boat Dock - Central	The covered dock is in good condition and is supported by encapsulated EPS floats. Useful life is estimated to be at least 15 years. Reference pictures E1 through E6
F	Houseboat Dock - West	The houseboat dock is one of the newer docks in the marina and appears to be in very good condition. The dock contains power and water facilities and is supported by encapsulated EPS floats. Useful life estimated to be at least 20 years. Reference pictures F1 through F10
G	House Boat Service Dock	The houseboat service dock is constructed of concrete and is supported by an unknown substrate. The dock is showing signs of cracking and spalling edges and would not likely be conducive to supporting a modern marina operation. Useful life estimated to be 5 years. Reference pictures G1 through G7.
H	Marina Store	The marina store is in fair to poor condition. The bathrooms have been recently remodeled; however the remaining facility is showing substantial wear and damage. The structure is supported on exposed EPS floats which show significant deterioration. In addition, the decking panels are generally in disrepair. The sewage ejection system with radio based level controls appears new and could be salvaged. The electrical transformers and panels are beginning to rust. Maintenance on the power distribution panel has probably been minimal. Some electrical equipment is installed with substandard wiring techniques. Electrical terminations and components have probably corroded and aged prematurely in the marine environment. The remaining MEP components are nearing the end of their useful life, although some components may have salvage value. No roof leaks were observed. Useful life estimated to be 5 years if exposed styrofoam is allowed to remain. Assumption is made that exposed styrofoam floats will no longer be allowed and must be replaced. Based on this assumption, useful life estimated to be 0 years. Reference pictures H1 through H39.
I	Dock Attached to Marina Store	The dock directly attached to the marina store is constructed of wood and a composite walking surface. Deterioration was observed from wave damage and boat abrasion/ impact. Useful life estimated to be 3 years. Reference pictures I1 through I7.
J	Entrance Ramp	The entrance ramp onto the marina appears to be in relatively good condition. The ramp is supported on encapsulated floats. Useful life estimated to be 10 years. Reference pictures J1 through J4.
K	Gas Dock	The gas dock is constructed of wood decking and is a state of extreme disrepair. While it appears that the dock is currently being repaired to mitigate any further deterioration,

		useful life estimated to 0 years. Reference pictures K1 through K3.
L	Houseboat Anchorage	The houseboat anchorage consists of a grid of cables and mooring balls as depicted on the LTDP drawing 5. While the system appears to be in good condition, a significant portion of the system will have to be reconstructed if the marina is relocated. Useful life estimated to be 10 years. Reference pictures L1 through L3.
M	Land Based Infrastructure and Facilities	The land based facilities that support the floating marina consist of septic tanks and piping, fuel storage and piping, fuel island, electrical transformer, main power switchboard, underground and exposed conduit, portable power cables, and a water supply and piping. In addition, there are the access road, two parking areas, fencing, the well site, and a shop/office building. The access road within the scope of this study includes that portion within the marina boundary, not the entire length from the intersection with Highway 49 to the marina. These facilities are in fair condition. Due to low lake levels, it appears that that a new septic poly tank was added and electrical cables have been extended to the floating facility. Average useful life estimated to be 10 years. Reference pictures M1 through M11.

COST ESTIMATES

Based on the above condition assessment, a Class 4 conceptual-level estimate was developed to price replacement of those components with a useful life less than 5 years, and to refurbish land based infrastructure. This estimate, which totals $2,947,170, is presented on Table 3.

Land based infrastructure (Item M in Table 2) is in fair condition and can remain in service with refurbishing that would include repainting electrical cabinets, exposed piping, and fencing; repairing fencing hardware and re-stretching fencing fabric; covering the well-head area in a small shack for weather protection and security; patching asphalt concrete road and parking areas and perimeter dikes; including roads without surfacing; and some modernization of the shop/office building.

The concept of relocating the marina was discussed as part of future planning to mitigate the storm damage potential that exists at the present site. Table 4 provides an estimate of the costs related to relocating the marina to another location on the lake, which totals $760,734. Only the floating components suitable for continued use and the infrastructure to directly support the floating components were addressed in this estimate.

Additionally per a request from Duane Paul, a Class 4 conceptual-level estimate was developed to price the replacement of the entire marina, regardless of age or condition. The approximate useful life of each new component is also included. This estimate is presented in Table 5 and 6.

Estimates are based upon 2010 dollar values. Estimates include escalation to 2012 and a 15-percent contingency.

Reference the attached detailed estimates for the cost breakdown per component and the applicable exclusions.

Table 3 - Class 4 conceptual-level estimate						
Item	**Description**	**Quantity**	**Unit**	**Unit Price**	**Amount**	**Total**
B	**Marina Utility Shed**					$ 21,150
	Demo	150	SF	$ 6.00	$ 900	
	Substructure	150	SF	$ 35.00	$ 5,250	
	Shed	150	SF	$ 100.00	$ 15,000	
C	**Covered Boat Dock - East**					$ 234,203
	Demo	7178	SF	$ 3.50	$ 25,123	
	Dock	1872	SF	$ 35.00	$ 65,520	
	Dock Cover	7178	SF	$ 20.00	$ 143,560	
D	**Mooring Dock**					Reused
E	**Covered Boat Dock - Central**					Reused
F	**Houseboat Dock - West**					Reused
G	**House Boat Service Dock**					$ 91,920
	Demo	1640	SF	$ 3.00	$ 4,920	
	Dock	1540	SF	$ 50.00	$ 77,000	
	Service Shed	100	SF	$ 100.00	$ 10,000	
H	**Marina Store**					$ 773,200
	Demo	5200	SF	$ 6.00	$ 31,200	
	Substructure	5200	SF	$ 35.00	$ 182,000	
	Structure	2800	SF	$ 200.00	$ 560,000	
I	**Dock Attached to Marina Store**					$ 205,200
	Demo	5400	SF	$ 3.00	$ 16,200	
	Main Dock	5400	SF	$ 35.00	$ 189,000	
J	**Entrance Ramp**					Reused
K	**Gas Dock**					$ 87,600
	Demo	1200	SF	$ 3.00	$ 3,600	
	Dock	1200	SF	$ 45.00	$ 54,000	
	Services	1200	SF	$ 25.00	$ 30,000	
L	**Houseboat Anchorage**					$ 654,500
	Cable	19500	SF	$ 10.00	$ 195,000	
	Mooring ball anchors	50	SF	$ 7,500.00	$ 375,000	
	Adjustment winch	1	SF	$ 3,500.00	$ 3,500	
	Main stays	9	SF	$ 5,000.00	$ 45,000	
	Land cassions	18	SF	$ 2,000.00	$ 36,000	
M	**Land Based Infrastructure / Facilities**					$ 75,000
	Refub (E) land based infrastructure	1	Al	$ 75,000.00	$ 75,000	
	Sub-total					2,142,773
	Contractor Markup		%	15	$ 321,416	321,416
	Sub-total					2,464,189
	Design Contingency		%	15	$ 369,628	$ 369,628
	Sub-total					2,833,817
	Escalation to 2012		%	4	$ 113,353	$ 113,353
	Table 3 Total					**2,947,170**

	Floating component relocation	1	Al	$ 50,000.00	$ 50,000	
	Parking lot	50000	SF	$ 5.00	$ 250,000	
	Lighting	10	Ea	$ 4,000.00	$ 40,000	
	Access / launch ramp concrete	6000	SF	$ 8.00	$ 48,000	
	Electrical substation	1	Al	$ 75,000.00	$ 75,000	
	Distribution to 1st connection point	1	Al	$ 20,000.00	$ 20,000	
	Convault 10000 fuel tank	1	Ea	$ 30,000.00	$ 30,000	
	Fuel Piping/ Equipment	1	Al	$ 5,000.00	$ 5,000	
	Fuel tank SOG	150	SF	$ 10.00	$ 1,500	
	Septic tank	1	Al	$ 7,000.00	$ 7,000	
	Septic piping	1	Al	$ 7,500.00	$ 7,500	
	Septic tank SOG	200	SF	$ 8.00	$ 1,600	
	Misc fencing	1	Al	$ 10,000.00	$ 10,000	
	Water piping	1	Al	$ 7,500.00	$ 7,500	
	Sub-total					$ 553,100
	Contractor Markup		%	15	$ 82,965	$ 82,965
	Sub-total					$ 636,065
	Design Contingency		%	15	$ 95,410	$ 95,410
	Sub-total					$ 731,475
	Escalation to 2012		%	4	$ 29,259	$ 29,259
	Table 4 Total					**$ 760,734**
	Total of Tables 3 & 4					**$ 3,707,904**

Exclusions for Tables 3 & 4:

Replacement of existing items not priced
Dump fees or salvage value
Service yard or maintenance functions
Propane barge, fireboat or gov boat slip
Wave rider floats
Offsite infrastructure
Provision of temp power
Paving or grading for new access road(s)
Well or water line to new location
Wave attenuation
Power to transformer location
Repair of refurbishment of relocated items
Telephone
Signage
EIR or Geotech study
Habitat or offsite mitigation
Permits or fees
Design, CM or staff support costs

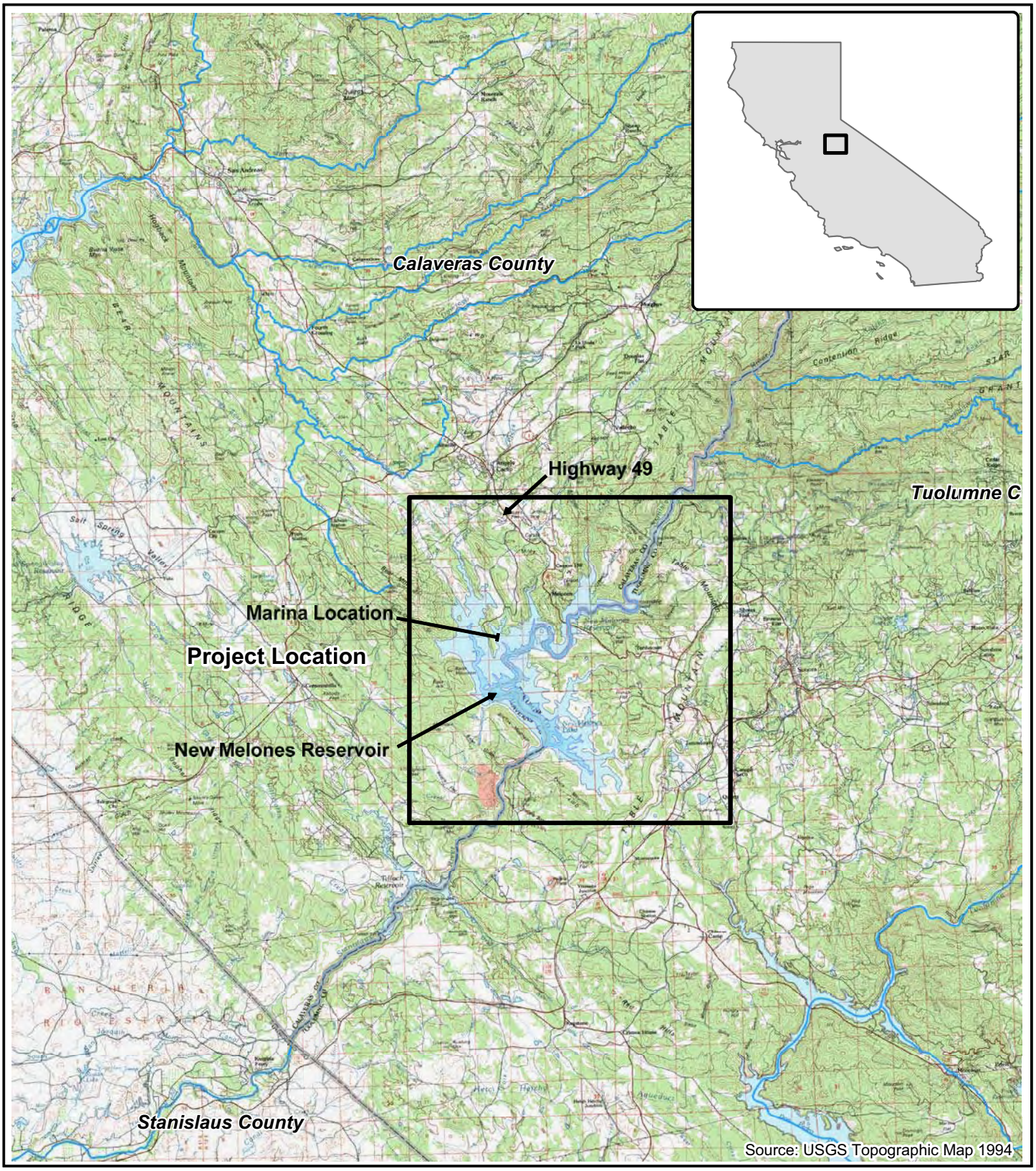
Table 5 - Class 4 conceptual-level estimate - 100% Replacement of Floating Components							
Item	**Description**	**Quantity**	**Unit**	**Unit Price**	**Amount**	**Total**	**Estimated Useful life (Yrs)**
B	**Marina Utility Shed**					$ 21,150	**30**
	Removal to above high water line	150	SF	$ 6.00	$ 900		
	Substructure	150	SF	$ 35.00	$ 5,250		
	Shed	150	SF	$ 100.00	$ 15,000		
C	**Covered Boat Dock - East**					$ 230,614	**30**
	Removal to above high water line	7178	SF	$ 3.00	$ 21,534		
	Dock	1872	SF	$ 35.00	$ 65,520		
	Dock Cover	7178	SF	$ 20.00	$ 143,560		
D	**Mooring Dock**					$ 102,600	**30**
	Removal to above high water line	2700	SF	$ 3.00	$ 8,100		
	Dock	2700	SF	$ 35.00	$ 94,500		
E	**Covered Boat Dock - Central**					$ 303,699	**30**
	Removal to above high water line	8773	SF	$ 3.00	$ 26,319		
	Dock	2912	SF	$ 35.00	$ 101,920		
	Dock Cover	8773	SF	$ 20.00	$ 175,460		
F	**Houseboat Dock - West**					$ 413,488	**30**
	Removal to above high water line	9616	SF	$ 3.00	$ 28,848		
	Dock	9616	SF	$ 35.00	$ 336,560		
	Services	9616	SF	$ 5.00	$ 48,080		
G	**House Boat Service Dock**					$ 91,920	**30**
	Removal to above high water line	1640	SF	$ 3.00	$ 4,920		
	Dock	1540	SF	$ 50.00	$ 77,000		
	Service Shed	100	SF	$ 100.00	$ 10,000		
H	**Marina Store**					$ 773,200	**30**
	Removal to above high water line	5200	SF	$ 6.00	$ 31,200		
	Substructure	5200	SF	$ 35.00	$ 182,000		
	Structure	2800	SF	$ 200.00	$ 560,000		
I	**Dock Attached to Marina Store**					$ 205,200	**30**
	Removal to above high water line	5400	SF	$ 3.00	$ 16,200		
	Dock	5400	SF	$ 35.00	$ 189,000		
J	**Entrance Ramp**					$ 13,750	**30**
	Removal to above high water line	50	LF	$ 15.00	$ 750		
	Ramp	50	LF	$ 260.00	$ 13,000		
K	**Gas Dock**					$ 87,600	**20**
	Removal to above high water line	1200	SF	$ 3.00	$ 3,600		
	Dock	1200	SF	$ 45.00	$ 54,000		
	Services	1200	SF	$ 25.00	$ 30,000		
L	**Houseboat Anchorage**					$ 674,500	**40**
	Removal to above high water line	1	AL	$ 20,000.00	$ 20,000		
	Cable	19500	SF	$ 10.00	$ 195,000		
	Mooring ball anchors	50	SF	$ 7,500.00	$ 375,000		
	Adjustment winch	1	SF	$ 3,500.00	$ 3,500		
	Main stays	9	SF	$ 5,000.00	$ 45,000		
	Land cassions	18	SF	$ 2,000.00	$ 36,000		
	Sub-total					2,917,721	
	Contractor Markup		%	15	$ 437,658	437,658	
	Sub-total					3,355,379	
	Design Contingency		%	15	$ 503,307	$ 503,307	
	Sub-total					3,858,686	
	Escalation to 2012		%	4	$ 154,347	$ 154,347	
	Table 5 Total					**4,013,033**	

Table 6 - Class 4 conceptual-level estimate - 100% Replacement Land Based Components							
Item	**Description**	**Quantity**	**Unit**	**Unit Price**	**Amount**	**Total**	**Estimated Useful life (Yrs)**
	Installation of New Land Based Infrastructure Support					$ 523,100	**40**
	Parking lot	50000	SF	$ 5.00	$ 250,000		
	Lighting	10	Ea	$ 4,000.00	$ 40,000		
	Access / launch ramp concrete	6000	SF	$ 8.00	$ 48,000		
	Electrical substation	1	Al	$ 75,000.00	$ 75,000		
	Distribution to 1st connection point	1	Al	$ 20,000.00	$ 20,000		
	Convault 10000 fuel tank	1	Ea	$ 30,000.00	$ 30,000		
	Fuel Piping/ Equipment	1	Al	$ 5,000.00	$ 5,000		
	Fuel tank SOG	150	SF	$ 10.00	$ 1,500		
	Septic tank	1	Al	$ 7,000.00	$ 7,000		
	Septic piping	1	Al	$ 7,500.00	$ 7,500		
	Septic tank SOG	200	SF	$ 8.00	$ 1,600		
	Water piping	1	Al	$ 7,500.00	$ 7,500		
	Misc fencing	1	Al	$ 10,000.00	$ 10,000		
	Demo of abandoned MEP facilities	1	Al	$ 20,000.00	$ 20,000		
	Sub-total					$ 523,100	
	Contractor Markup		%	15	$ 78,465	$ 78,465	
	Sub-total					$ 601,565	
	Design Contingency		%	15	$ 90,235	$ 90,235	
	Sub-total					$ 691,800	
	Escalation to 2012		%	4	$ 27,672	$ 27,672	
	Table 6 Total					**$ 719,472**	
	Total of Table 5 & 6					**$ 4,732,505**	

Exclusions for Table 5 & 6:

Removed marina structures will be let at high water mark
Dump fees or salvage value
Replacement of existing items not priced
Service yard or maintenance functions
Propane barge, fireboat or gov boat slip
Wave rider floats
Offsite infrastructure
Provision of temp power
Paving or grading for new access road(s)
Well or water line to new location
Equipment or material for extension of MEP from main POC due to water height fluctuation
Landscaping
Parking bumpers
Land based buildings
Wave attenuation
Power to transformer location
Telephone Service to marina
Signage
EIR or Geotech study
Habitat or offsite mitigation
Permits or fees
Design, CM or staff support costs

cc: Tim Murchison
Mike Egge



Project Location

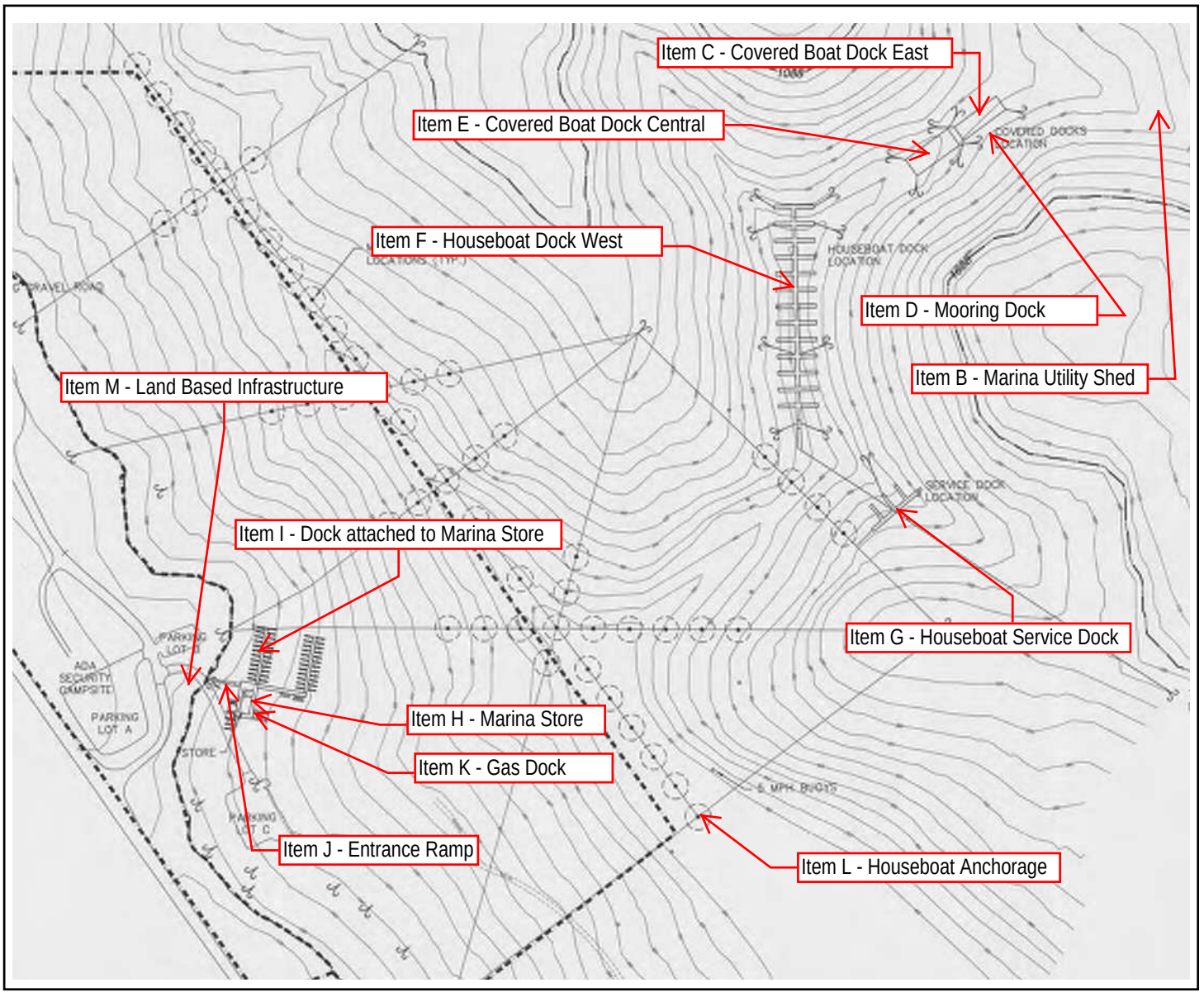
New Melones Reservoir

N

0 4

Miles

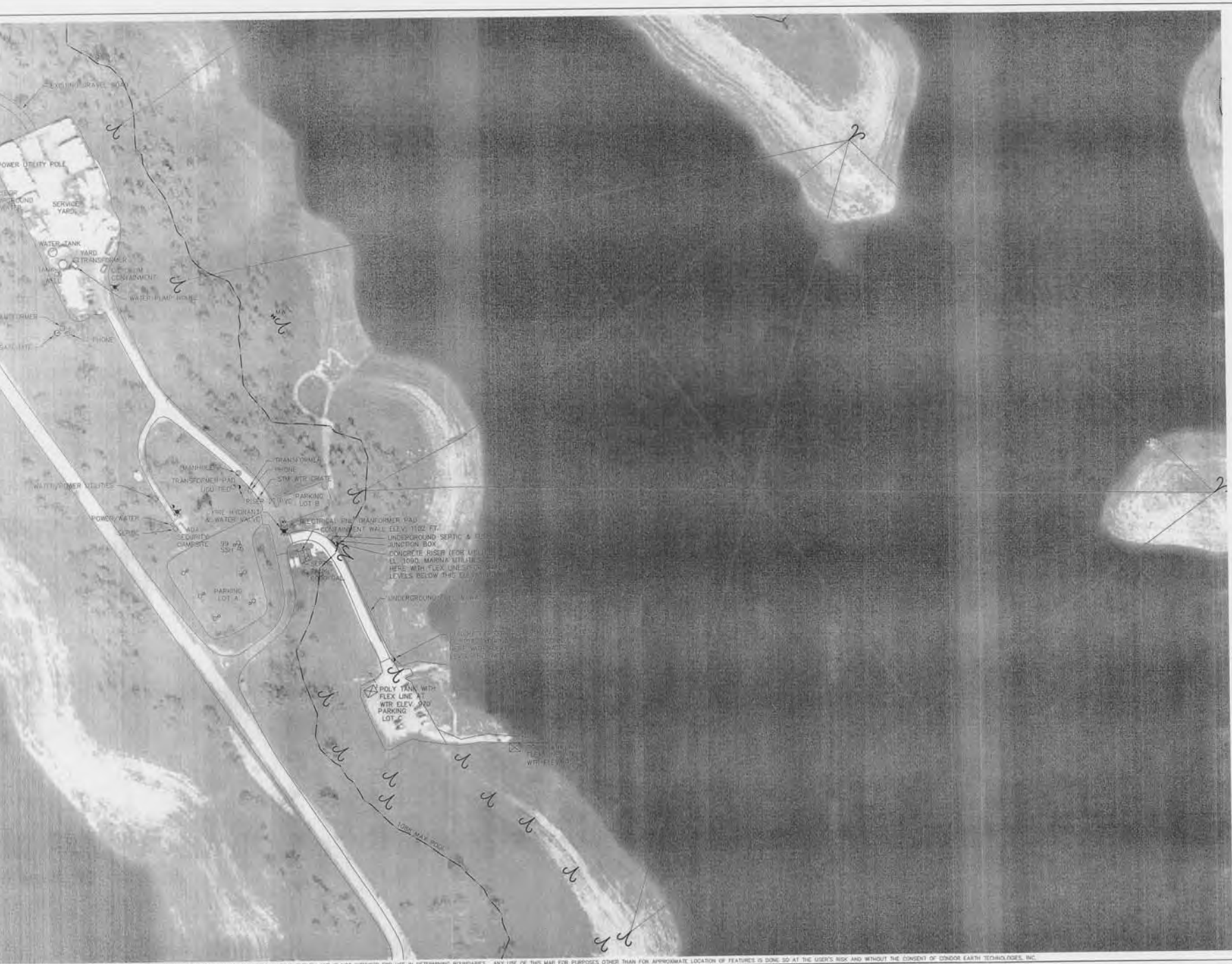
Figure 1



Marina Facility Components

Figure 2

Annex B-1



NORTH

100 0 200
SCALE IN FEET

LEGEND

●	SURVEY PIN FOUND (AS DESCRIBED)
○ OR □	OBJECT WITH LABEL SHOWN
	FIRE HYDRANT
	ANCHOR
○●	LIGHT POLE
○	POWER POLE
◑	RISER
MW ◆	MONITOR WELL
WV ⊠	WATER VALVE
— — —	PROPERTY BOUNDARY
□	UTILITY
△	SURVEY CONTROL MONUMENT
—○—	CHAIN LINK FENCE
—×—	BARBED WIRE FENCE
	CONTOUR MAJOR
	CONTOUR MINOR
CNDT	CONDUIT
DI	DROP INLET
ELEC	ELECTRICAL
FD	FOUND (MONUMENT)
HB	HOSE BIB
HVAC	HEATING/AIR CONDITIONER
IRR	IRRIGATION
MTR	METER
REG	REGULATOR
RSR	RISER
SCCO	SANITARY SEWER CLEANOUT
SRVP	SERVICE POLE
SSH	SPIKE & SHINER (SURVEY CONTROL)
STM	STORM
TEL	TELEPHONE
VLT	VAULT
VLV	VALVE
WTR	WATER
WV	WATER VALVE

NOTES:

1. CONTOURS ADAPTED FROM USGS 7.5 MIN. QUADRANGLE DEM DATA. 20' CONTOUR INTERVAL INTERPOLATED FROM 40' CONTOUR INTERVAL.
2. AIR PHOTO ADAPTED FROM CALAVERAS COUNTY PUBLIC INFORMATION GIS DEPARTMENT. AIR PHOTO DATED 2002.

Number	Northing	Easting	Elevation	Description
CPT 99	2186573.80	6549257.02	1114.16	Spike & Shiner

REV#	DATE	BY	DESCRIPTION
G	4-2-09	MRC	GENERAL REVISIONS

NEW MELONES LAKE MARINA

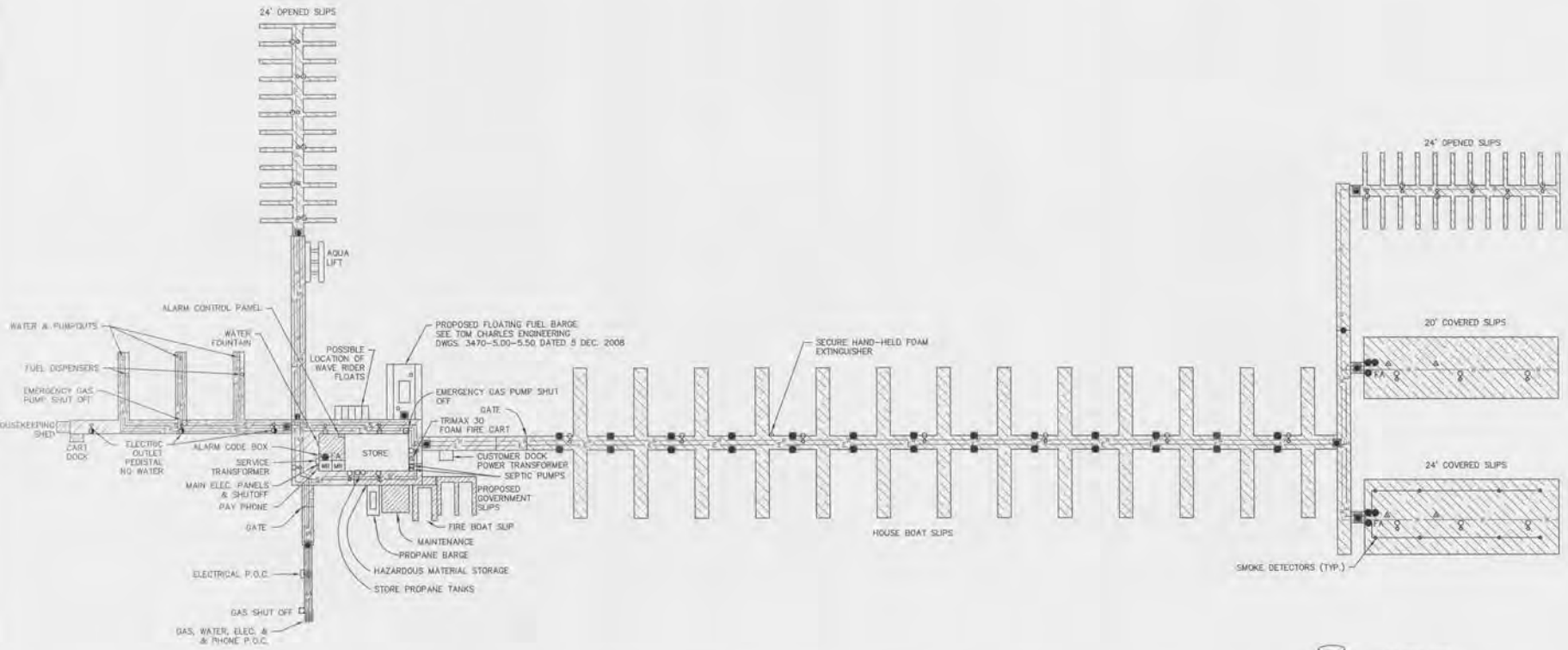
LONG TERM DEVELOPMENT PLAN

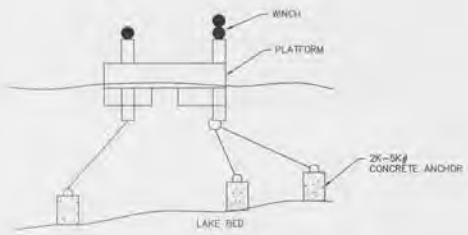
MARINA LAYOUT
UTILITIES
EL. 1020'

CONDOR EARTH TECHNOLOGIES, INC.
21663 Brian Lane
P.O. Box 2923
Sonora, Ca. 95370
(209) 532-5361
fax (209) 532-5775
www.condorearth.com
CONDOR

DWG
5177-07
2.0

JOB#	5177	DRAWN: MTM	SCALE: AS SHOWN
PRINTED:	10/06/09	CHECKED: MRC	FILE: 517702

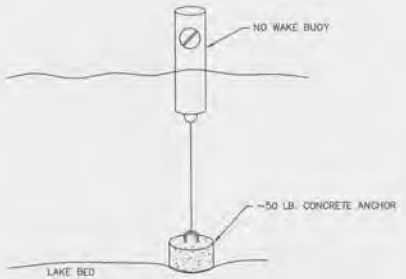




1 TIRE BOOM ANCHOR DETAIL (TYP.)
Scale: N.T.S.

LEGEND

- UNRESTRICTED
- SLIP HOLDERS & GUESTS ONLY
- RESTRICTED
- G — GAS LINE
- W — WATER LINE
- S — SEWER LINE
- E — ELECTRICAL LINE
- PIVOT POINTS
- FA FIRE ALARM PULL BOXES (3)
- POWER BOXES WITH WATER BIBS (HB SLIPS)
- 110 VOLT POWER (COVERED SLIPS)
- LIGHT
- FIRE EXTINGUISHER
- FLEX CONNECTION



2 NO WAKE BUOY DETAIL
Scale: N.T.S.

NUM	DATE	BY	DESCRIPTION
0	8-3-09	MRC	GENERAL REVISIONS

NEW MELONES LAKE MARINA

LONG TERM DEVELOPMENT PLAN

DOCK UTILITIES & SUMMER LAYOUT

CONDOR EARTH TECHNOLOGIES, INC.
2480 Shaw Lane
P.O. Box 2605
Sonora, CA 95370
(209) 532-4341
fax (209) 532-4775
www.condorearth.com
CONDOR®

DWG 5177-07 3.0

JOB#	5177	DRAWN: MTM	SCALE: AS SHOWN
PRINTED:	10/06/09	CHECKED: MRC	FILE: 5177D2

NORTH

SCALE: 1"=1'

LEGEND:

ANCHOR

MOORING BUOYS

NOTES:

1. CONTOURS ADAPTED FROM USGS 7.5 MIN. QUADRANGLE DEM DATA. 20' CONTOUR INTERVAL INTERPOLATED FROM 40' CONTOUR INTERVAL.
2. BOLDED CONTOUR LINE DEPICTS LAKE SURFACE ELEVATION FOR SHOWN MARINA/DOCK LAYOUT.

NO.	DATE	BY	DESCRIPTION
0	9-5-08	MRC	GENERAL REVISIONS

NEW MELONES LAKE MARINA

LONG TERM DEVELOPMENT PLAN

MARINA LAYOUT
1088' ELEVATION
SUMMER CONFIGURATION

CONDOR EARTH TECHNOLOGIES, INC.
21563 Brian Lane
P.O. Box 4850
Sonora, CA 95370
(209) 532-3681
fax (209) 533-9210
www.condorearth.com
CONDOR®

DWG 5177-07 4.0

JOB# 5177 DRAWN: MTM SCALE: AS SHOWN
PRINTED: 10/08/08 CHECKED: MRC FILE 5177.03


NORTH
SCALE IN FEET
LEGEND:
ANCHOR
MOORING BUOYS
NOTES:
1. CONTOURS ADAPTED FROM USGS 7.5 MIN. QUADRANGLE DEM DATA. 20' CONTOUR INTER INTERPOLATED FROM 40' CONTOUR INTERVAL.
2. BOLDED CONTOUR LINE DEPICTS LAKE SURFA ELEVATION FOR SHOWN MARINA/DOCK LAYOU
MAX POOL 1088
1088
APPROXIMATE MARINA BOUNDARY AS INTERPRETED FROM B.O.R. DESCRIPTION "PREMISES DESCRIBED," APPROXIMATELY 20 ACRES LAND AND 50 ACRES ADJACENT WATER SURFACE (MAX POOL)
MOORING BALL LOCATIONS (TYP.)
EXISTING GRAVEL ROAD
SERVICE YARD
COVERED DOCKS LOCATION
HOUSEBOAT DOCK LOCATION
SERVICE DOCK LOCATION
TEMPORARY ANCHOR DEAD MAN
PARKING LOT B
ADA SECURITY CAMPSITE
PARKING LOT A
STORE
PARKING LOT C
5 MPH BUOYS
PUBLIC RAMP
NORMAL PREVAILING WINTER WIND DIRECTION
NEW MELONES LAKE MAR
LONG TERM DEVELOPMENT
MARINA LAYOUT
1088 ELEVATION
WINTER CONFIGURATION
CONDOR EARTH TECHNOLOGIES, INC.
CONDOR
DW
5177
5

Annex B-2

Pic #A1 Marina Overview.JPG

Pic #B1 Marina tool shed - location East.JPG

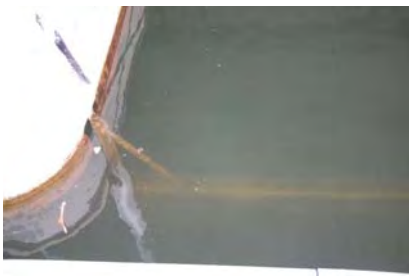
Pic #B2 Marina tool shed - location East.JPG

Pic #C1 Covered boat dock exterior view - location East.JPG

Pic #C2 Covered boat dock exterior view - location East.JPG

Pic #C3 Covered boat dock interior view - location East.JPG

Pic #C4 Covered boat dock interior view - location East.JPG



Pic #C5 Covered boat dock interior view - location East.JPG

Pic #C6 Covered boat dock interior view - location East.JPG

Pic #D1 Mooring dock - location East.JPG

Pic #D2 Mooring dock - location East.JPG

Pic #D3 Mooring dock - location East.JPG

Pic #D4 Mooring dock - location East.JPG

Pic #E1 Covered boat dock exterior view - location Central.JPG

Pic #E2 Covered boat dock exterior view - location Central.JPG

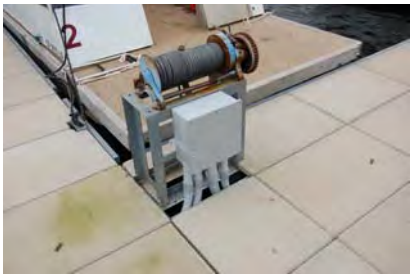
Pic #E3 Covered boat dock exterior view - location Central.JPG

Pic #E4 Covered boat dock exterior view - location Central.JPG

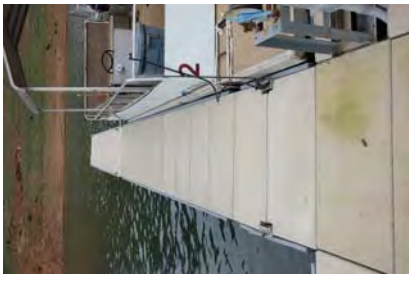
Pic #E5 Covered boat dock exterior view - location Central.JPG

Pic #E6 Covered boat dock exterior view - location Central.JPG

Pic #F1 Houseboat dock exterior view - location West.JPG



Pic #F2 Houseboat dock interior view - location West.JPG



Pic #F3 Houseboat dock interior view - location West.JPG

Pic #F4 Houseboat dock interior view - location West.JPG

Pic #F5 Houseboat dock interior view - location West.JPG

Pic #F6 Houseboat dock interior view - location West.JPG

Pic #F7 Houseboat dock interior view - location West.JPG

Pic #F8 Houseboat dock exterior view - location West.JPG

Pic #F8 Houseboat dock interior view - location West.JPG

Pic #F9 Houseboat dock exterior view - location West.JPG

Pic #F10 Houseboat dock interior view - location West.JPG

Pic #G1 Houseboat service dock - location South.JPG

Pic #G2 Houseboat service dock - location South.JPG

Pic #G3 Houseboat service dock - location South.JPG

Pic #G4 Houseboat service dock - location South.JPG

Pic #G5 Houseboat service dock - location South.JPG

Pic #G6 Houseboat service dock - location South.JPG

Pic #G7 Houseboat service dock - location South.JPG

Pic #H01 Marina Store.JPG

Pic #H02 SS pumps on Marina platform.JPG

Pic #H03 SS pumps on Marina platform.JPG

Pic #H04 Marina evap cooler.JPG

Pic #H05 Refridgerator unit on marina platform.JPG

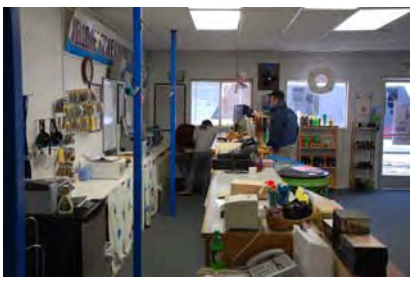
Pic #H06 Marina decking NE.JPG

Pic #H07 Marina decking East.JPG

Pic #H08 Marina North elevation.JPG

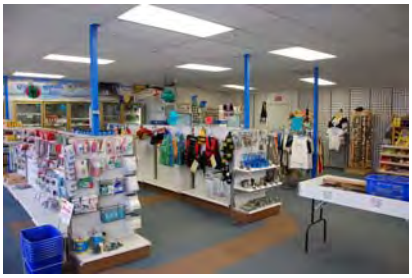
Pic #H09 Marina decking NW.JPG

Pic #H10 Marina heater.JPG



Pic #H11 Marina store North.JPG

Pic #H12 Marina store East.JPG



Pic #H13 5Marina store SW.JPG

Pic #H14 Marina decking West.JPG

Pic #H15 Marina store East.JPG

Pic #H16 Marina store NW.JPG

Pic #H17 Marina freezer.JPG

Pic #H18 Marina underside of room South.JPG

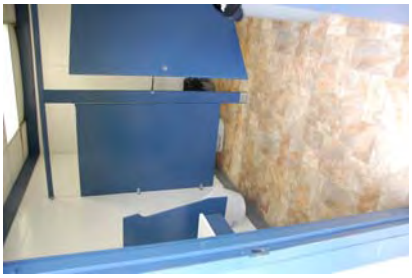
Pic #H19 Marina electrical panels interior South.JPG

Pic #H20 Marina electrical panels interior South.JPG

Pic #H21 Marina office NE.JPG

Pic #H22 Marina office South.JPG

Pic #H23 Marina elevation West.JPG



Pic #H24 Marina mens restoom.JPG

Pic #H25 Marina mens restoom.JPG

Pic #H26 Marina propane storage for unit heater.JPG

Pic #H27 Marina elevation West.JPG

Pic #H28 Marina elevation West.JPG

Pic #H29 Marina elevation NW.JPG

Pic #H30 Marina elevation North.JPG

Pic #H31 Marina elevation North.JPG

Pic #H32 Marina decking North.JPG

Pic #H33 Marina decking North.JPG

Pic #H34 Marina decking North.JPG

Pic #H35 Marina electrical North.JPG

Pic #H36 Marina roof North.JPG

Pic #H37 Marina elevation West.JPG

Pic #H38 Exterior Panel.jpg

Pic #H39 Exterior panel.jpg

Pic #I1 Boat dock attached to Marina.JPG

Pic #I2 Boat dock attached to Marina.JPG

Pic #I3 Boat dock attached to Marina.JPG

Pic #I4 Boat dock attached to Marina.JPG

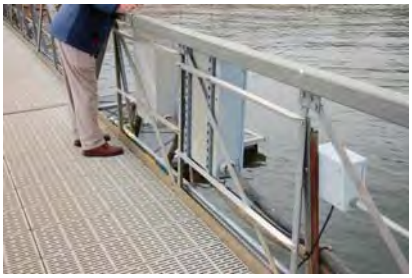
Pic #I5 Boat dock attached to Marina.JPG

Pic #I6 Boat dock attached to Marina.JPG

Pic #I7 Boat dock attached to Marina.JPG

Pic #J1 Marina entrance ramp.JPG

Pic #J2 Marina entrance ramp.JPG



Pic #J3 Marina entrance ramp.JPG

Pic #J4 Marina entrance ramp with utilities.JPG

Pic #K1 Gas dock attached to marina platform.JPG

Pic #K2 Gas dock attached to marina platform.JPG

Pic #K3 Gas dock attached to marina platform.JPG

Pic #L1 House boat anchorage.JPG

Pic #L2 Houseboat anchorage grid.JPG

Pic #L3 Houseboat anchorage mouring.JPG

Pic #M1 Supplemental septic storage tank.JPG

Pic #M2 Utility crossing manifold.JPG

Pic #M3 Original septic storage tank.JPG

Pic #M4 Marina entrance road.JPG

Pic #M5 Marina fuel storage tanks.JPG

Pic #M6 Marina electrical service.JPG

Pic #M7 Marina entrance road.JPG

Pic #M8 Marina parking lot.JPG

Pic #M9 transformer.jpg

Pic #M10 exterior switchboard.jpg

Pic #M11 Electrical cable to marina.jpg

Appendix C
Financial Feasibility Model – Analytical Assumptions

Table C-1. Key Assumptions Used in the Financial Feasibility Analysis

Assumption	Value
Visitation Levels (Annual % Change)	
Visitation (Year 1-20)	1.30%
Visitation (Year 11-20)	1.30%
Visitation (Year 21-30)	1.21%
Visitation (Year 31-40)	1.13%
Length of Season (Days)	
Peak Season	155
Off-Peak Season	210
Seasonal Rates	NO
Concessions Term (Years)	30
Capital Investment Responsibility	Concessionaire
Discount Rate	15.00%
Franchise Fee	4.00%
Occupancy Fee	$1,000

Table C-2. Facility Assumptions Used in the Financial Feasibility Analysis: Marina Services

MARINA: Moorage, Slip Rentals, Gas Sales, & Boat Repair		
Number of Facilities		
Moorage Area	50	slips
Transient Slips	20	slips
20' covered	28	slips
24' open	44	slips
24' covered	28	slips
House Boat	38	slips
Fixed Pier Area	1,000	sq. ft.
Slip Rental & Moorage Occupancy	Peak	Off-Peak
Moorings	95%	95%
Transient Slips	75%	10%
20' covered	95%	95%
24' open	95%	95%
24' covered	95%	95%
House Boat	95%	95%
Gas Sales	***Peak***	***Off-Peak***
Gross Sales	$214,000	$17,000
Boat Repair	$20,000	Annually
MARINA: Boat Rentals		
Number of Boats		
Houseboats	13	watercraft
Fishing Boat	3	watercraft
Patio Boat	4	watercraft

Table C-2. Facility Assumptions Used in the Financial Feasibility Analysis: Marina Services

MARINA: Moorage, Slip Rentals, Gas Sales, & Boat Repair		
Personal Watercraft	4	watercraft
Wakesetter	2	watercraft
Blue Water Ski Boat	6	watercraft
Boat Rental Occupancy	***Peak***	***Off-Peak***
Houseboats	40.0%	3.0%
Fishing Boat	15.0%	1.0%
Patio Boat	30.0%	2.0%
Personal Watercraft	10.0%	1.0%
Wakesetter	30.0%	2.0%
Blue Water Ski Boat	20.0%	1.0%
MARINA: Food Service		
Type	Outdoor Grill	
Sales	***Peak***	***Off-Peak***
Average Daily Sales	$1,000	$100
MARINA: Recreation Supply Store		
Size	1,000	sq. ft
Annual Sales	$110,000	year
MARINA: Dry Boat Storage		
Type	Open Dry Storage	
Units	100	
Occupancy	75%	Avg. Annual
Rate	$80	$/month (24' space)

Table C-3. Facility Assumptions Used in the Financial Feasibility Analysis: RV Park

RV PARK		
Units	75	units
Occupancy	***Peak***	***Off-Peak***
Occupancy Rate	50%	25%
Rate	***Peak***	***Off-Peak***
Nightly Rate	$50	$45

Table C-4. Facility Assumptions Used in the Financial Feasibility Analysis: Equestrian Riding Stables

EQUESTRIAN RIDING STABLES		
Services	**Riding Rentals Only**	
Number of Horses	15	Horses
Office Size	1,200	Sq. Ft.

Rental Occupancy	***Peak***	***Off-Peak***
% of Capacity	30%	5%
Rental Rates	***Peak***	***Off-Peak***
Equivalent Hourly Rate	$45	$35

Appendix D
Financial Feasibility Model – Result Tables

Table D-1. Operating Revenues and Expenses for Marina-Related Facilities

	Year																														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
REVENUES BY OPERATING DEPARTMENT																															
Moorings and Slip Rentals	$0	$990,000	$990,000	$990,000	$990,000	$990,000	$990,000	$990,000	$990,000	$990,000	$990,000	$990,000	$990,000	$990,000	$990,000	$990,000	$990,000	$990,000	$990,000	$990,000	$990,000	$990,000	$990,000	$990,000	$990,000	$990,000	$990,000	$990,000	$990,000	$990,000	$990,000
Gas Sales	$0	$231,000	$234,000	$237,000	$240,000	$243,000	$246,000	$250,000	$253,000	$256,000	$259,000	$263,000	$266,000	$270,000	$273,000	$277,000	$280,000	$284,000	$288,000	$291,000	$295,000	$299,000	$302,000	$306,000	$310,000	$314,000	$317,000	$321,000	$325,000	$329,000	$333,000
Boat Repair	$0	$20,000	$20,000	$20,000	$20,000	$20,000	$20,000	$20,000	$20,000	$20,000	$20,000	$20,000	$20,000	$20,000	$20,000	$20,000	$20,000	$20,000	$20,000	$20,000	$20,000	$20,000	$20,000	$20,000	$20,000	$20,000	$20,000	$20,000	$20,000	$20,000	$20,000
Boat Rentals	$0	$1,055,000	$1,068,000	$1,082,000	$1,096,000	$1,111,000	$1,125,000	$1,140,000	$1,155,000	$1,170,000	$1,185,000	$1,200,000	$1,216,000	$1,232,000	$1,248,000	$1,264,000	$1,280,000	$1,297,000	$1,314,000	$1,331,000	$1,348,000	$1,364,000	$1,381,000	$1,398,000	$1,415,000	$1,432,000	$1,449,000	$1,466,000	$1,484,000	$1,502,000	$1,520,000
Rec Supply Store	$0	$111,000	$112,000	$114,000	$115,000	$117,000	$118,000	$120,000	$121,000	$123,000	$125,000	$126,000	$128,000	$129,000	$131,000	$133,000	$135,000	$136,000	$138,000	$140,000	$142,000	$143,000	$145,000	$147,000	$149,000	$151,000	$152,000	$154,000	$156,000	$158,000	$160,000
Dry Storage	$0	$72,000	$73,000	$74,000	$75,000	$76,000	$77,000	$78,000	$79,000	$80,000	$81,000	$82,000	$83,000	$84,000	$85,000	$86,000	$87,000	$89,000	$90,000	$91,000	$92,000	$93,000	$94,000	$95,000	$97,000	$98,000	$99,000	$100,000	$101,000	$103,000	$104,000
Outdoor Grill	$0	$176,000	$178,000	$181,000	$183,000	$185,000	$188,000	$190,000	$193,000	$195,000	$198,000	$200,000	$203,000	$206,000	$208,000	$211,000	$214,000	$216,000	$219,000	$222,000	$225,000	$228,000	$230,000	$233,000	$236,000	$239,000	$242,000	$245,000	$248,000	$251,000	$254,000
Total Operating Revenues	***$0***	***$2,654,000***	***$2,676,000***	***$2,697,000***	***$2,719,000***	***$2,741,000***	***$2,764,000***	***$2,787,000***	***$2,810,000***	***$2,833,000***	***$2,857,000***	***$2,881,000***	***$2,905,000***	***$2,930,000***	***$2,955,000***	***$2,980,000***	***$3,006,000***	***$3,032,000***	***$3,058,000***	***$3,085,000***	***$3,112,000***	***$3,137,000***	***$3,163,000***	***$3,189,000***	***$3,215,000***	***$3,242,000***	***$3,269,000***	***$3,296,000***	***$3,324,000***	***$3,352,000***	***$3,380,000***
EXPENSES																															
Cost of Sales	$0	$278,000	$282,000	$286,000	$289,000	$293,000	$297,000	$301,000	$305,000	$309,000	$313,000	$317,000	$321,000	$325,000	$329,000	$333,000	$338,000	$342,000	$347,000	$351,000	$356,000	$360,000	$364,000	$369,000	$373,000	$378,000	$382,000	$387,000	$392,000	$396,000	$401,000
Personnel Expenses	$0	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000
Maintenance & Repair	$0	$205,000	$208,000	$210,000	$213,000	$216,000	$219,000	$222,000	$225,000	$227,000	$230,000	$233,000	$236,000	$239,000	$243,000	$246,000	$249,000	$252,000	$255,000	$259,000	$262,000	$265,000	$269,000	$272,000	$275,000	$278,000	$282,000	$285,000	$289,000	$292,000	$296,000
Other Operating	$0	$15,000	$15,000	$15,000	$16,000	$16,000	$16,000	$16,000	$16,000	$17,000	$17,000	$17,000	$17,000	$18,000	$18,000	$18,000	$18,000	$18,000	$19,000	$19,000	$19,000	$19,000	$20,000	$20,000	$20,000	$20,000	$21,000	$21,000	$21,000	$21,000	$22,000
Insurance	$0	$150,000	$150,000	$150,000	$150,000	$150,000	$150,000	$150,000	$150,000	$150,000	$150,000	$150,000	$150,000	$150,000	$150,000	$150,000	$150,000	$150,000	$150,000	$150,000	$150,000	$150,000	$150,000	$150,000	$150,000	$150,000	$150,000	$150,000	$150,000	$150,000	$150,000
Franchise Fee	$0	$104,000	$107,000	$108,000	$109,000	$110,000	$111,000	$111,000	$112,000	$113,000	$114,000	$115,000	$116,000	$117,000	$118,000	$119,000	$120,000	$121,000	$122,000	$123,000	$124,000	$125,000	$127,000	$128,000	$129,000	$130,000	$131,000	$132,000	$133,000	$134,000	$135,000
Annual Lease	$0	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000
Refunds	$0	$4,000	$4,000	$4,000	$4,000	$4,000	$4,000	$4,000	$4,000	$4,000	$4,000	$4,000	$4,000	$4,000	$4,000	$4,000	$4,000	$4,000	$4,000	$4,000	$4,000	$4,000	$4,000	$4,000	$4,000	$4,000	$4,000	$4,000	$4,000	$4,000	$4,000
Total Operating Expenses	***$0***	***$1,596,000***	***$1,606,000***	***$1,613,000***	***$1,620,000***	***$1,628,000***	***$1,636,000***	***$1,644,000***	***$1,652,000***	***$1,660,000***	***$1,668,000***	***$1,676,000***	***$1,684,000***	***$1,693,000***	***$1,701,000***	***$1,710,000***	***$1,719,000***	***$1,728,000***	***$1,737,000***	***$1,746,000***	***$1,755,000***	***$1,764,000***	***$1,773,000***	***$1,782,000***	***$1,791,000***	***$1,800,000***	***$1,809,000***	***$1,818,000***	***$1,828,000***	***$1,838,000***	***$1,847,000***
Income Taxes (Federal & State)	$0	$51,000	$56,000	$63,000	$70,000	$77,000	$84,000	$91,000	$99,000	$106,000	$113,000	$121,000	$129,000	$136,000	$144,000	$151,000	$158,000	$166,000	$173,000	$181,000	$188,000	$195,000	$203,000	$210,000	$217,000	$225,000	$233,000	$240,000	$248,000	$256,000	$264,000
Depreciation	$0	$475,000	$475,000	$475,000	$475,000	$475,000	$475,000	$475,000	$475,000	$475,000	$475,000	$475,000	$475,000	$475,000	$475,000	$475,000	$475,000	$475,000	$475,000	$475,000	$475,000	$475,000	$475,000	$475,000	$475,000	$475,000	$475,000	$475,000	$475,000	$475,000	$475,000
Interest	$189,000	$442,000	$442,000	$442,000	$442,000	$442,000	$442,000	$442,000	$442,000	$442,000	$442,000	$442,000	$442,000	$442,000	$442,000	$442,000	$442,000	$442,000	$442,000	$442,000	$442,000	$442,000	$442,000	$442,000	$442,000	$442,000	$442,000	$442,000	$442,000	$442,000	$442,000
Total Expenses	***$189,000***	***$2,564,000***	***$2,579,000***	***$2,593,000***	***$2,608,000***	***$2,622,000***	***$2,637,000***	***$2,652,000***	***$2,667,000***	***$2,683,000***	***$2,698,000***	***$2,714,000***	***$2,730,000***	***$2,746,000***	***$2,763,000***	***$2,778,000***	***$2,794,000***	***$2,811,000***	***$2,827,000***	***$2,844,000***	***$2,860,000***	***$2,876,000***	***$2,892,000***	***$2,909,000***	***$2,925,000***	***$2,942,000***	***$2,959,000***	***$2,976,000***	***$2,993,000***	***$3,010,000***	***$3,028,000***
EBITDA	**$0**	**$1,058,000**	**$1,070,000**	**$1,084,000**	**$1,099,000**	**$1,113,000**	**$1,128,000**	**$1,143,000**	**$1,158,000**	**$1,174,000**	**$1,189,000**	**$1,205,000**	**$1,221,000**	**$1,237,000**	**$1,253,000**	**$1,270,000**	**$1,287,000**	**$1,304,000**	**$1,321,000**	**$1,339,000**	**$1,356,000**	**$1,373,000**	**$1,390,000**	**$1,407,000**	**$1,425,000**	**$1,442,000**	**$1,460,000**	**$1,478,000**	**$1,496,000**	**$1,514,000**	**$1,533,000**
Net Profit	**($189,000)**	**$90,000**	**$97,000**	**$104,000**	**$111,000**	**$119,000**	**$127,000**	**$135,000**	**$143,000**	**$151,000**	**$159,000**	**$167,000**	**$175,000**	**$184,000**	**$192,000**	**$202,000**	**$211,000**	**$221,000**	**$231,000**	**$241,000**	**$251,000**	**$261,000**	**$270,000**	**$280,000**	**$290,000**	**$300,000**	**$310,000**	**$321,000**	**$331,000**	**$341,000**	**$352,000**
Net Profit (% of Revenues)	**--**	**3.4%**	**3.6%**	**3.9%**	**4.1%**	**4.3%**	**4.6%**	**4.8%**	**5.1%**	**5.3%**	**5.6%**	**5.8%**	**6.0%**	**6.3%**	**6.5%**	**6.8%**	**7.0%**	**7.3%**	**7.6%**	**7.8%**	**8.1%**	**8.3%**	**8.5%**	**8.8%**	**9.0%**	**9.3%**	**9.5%**	**9.7%**	**10.0%**	**10.2%**	**10.4%**

Table D-2. Cash-Flow Analysis for Marina-Related Facilities

	Year																														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Cash In																															
Beginning Cash	$0	($2,295,000)	($1,796,000)	($1,292,000)	($780,000)	($260,000)	$259,000	$793,000	$1,336,000	$1,887,000	$2,445,000	$2,144,000	$2,719,000	$3,302,000	$3,894,000	$4,494,000	$5,095,000	$5,715,000	$6,344,000	$6,983,000	$7,632,000	$7,423,000	$8,092,000	$8,771,000	$9,459,000	$10,157,000	$10,857,000	$11,575,000	$12,303,000	$13,042,000	$13,792,000
Sales	$0	$2,653,000	$2,675,000	$2,696,000	$2,718,000	$2,740,000	$2,763,000	$2,786,000	$2,809,000	$2,832,000	$2,856,000	$2,880,000	$2,904,000	$2,929,000	$2,954,000	$2,979,000	$3,005,000	$3,031,000	$3,057,000	$3,083,000	$3,110,000	$3,136,000	$3,162,000	$3,188,000	$3,214,000	$3,241,000	$3,268,000	$3,295,000	$3,323,000	$3,351,000	$3,379,000
Other Revenues	$0	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000
Sale of Assets	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,292,000
Total Available Cash	***$0***	***$359,000***	***$879,000***	***$1,406,000***	***$1,940,000***	***$2,481,000***	***$3,022,000***	***$3,580,000***	***$4,146,000***	***$4,720,000***	***$5,302,000***	***$5,025,000***	***$5,624,000***	***$6,232,000***	***$6,849,000***	***$7,474,000***	***$8,101,000***	***$8,747,000***	***$9,402,000***	***$10,068,000***	***$10,744,000***	***$10,560,000***	***$11,255,000***	***$11,959,000***	***$12,674,000***	***$13,399,000***	***$14,125,000***	***$14,871,000***	***$15,627,000***	***$16,394,000***	***$18,464,000***
Cash Out	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Salaries	$0	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000	$838,000
Other Operating Expenses	$0	$758,000	$767,000	$775,000	$782,000	$790,000	$798,000	$805,000	$813,000	$821,000	$829,000	$838,000	$846,000	$854,000	$863,000	$872,000	$881,000	$889,000	$898,000	$908,000	$917,000	$926,000	$934,000	$943,000	$952,000	$962,000	$971,000	$980,000	$990,000	$999,000	$1,009,000
Loan Payments	$189,000	$509,000	$509,000	$509,000	$509,000	$509,000	$509,000	$509,000	$509,000	$509,000	$509,000	$509,000	$509,000	$509,000	$509,000	$509,000	$509,000	$509,000	$509,000	$509,000	$509,000	$509,000	$509,000	$509,000	$509,000	$509,000	$509,000	$509,000	$509,000	$509,000	$509,000
Capital Expenditures	$2,105,000	$0	$0	$0	$0	$9,000	$0	$0	$0	$0	$868,000	$0	$0	$0	$0	$9,000	$0	$0	$0	$0	$868,000	$0	$0	$0	$0	$9,000	$0	$0	$0	$0	$883,000
Tax Payments	$0	$51,000	$56,000	$63,000	$70,000	$77,000	$84,000	$91,000	$99,000	$106,000	$113,000	$121,000	$129,000	$136,000	$144,000	$151,000	$158,000	$166,000	$173,000	$181,000	$188,000	$195,000	$203,000	$210,000	$217,000	$225,000	$233,000	$240,000	$248,000	$256,000	$264,000
Total Cash Out	***$2,295,000***	***$2,156,000***	***$2,171,000***	***$2,185,000***	***$2,200,000***	***$2,223,000***	***$2,229,000***	***$2,244,000***	***$2,259,000***	***$2,275,000***	***$3,158,000***	***$2,306,000***	***$2,322,000***	***$2,338,000***	***$2,354,000***	***$2,379,000***	***$2,386,000***	***$2,402,000***	***$2,419,000***	***$2,435,000***	***$3,321,000***	***$2,468,000***	***$2,484,000***	***$2,501,000***	***$2,517,000***	***$2,542,000***	***$2,551,000***	***$2,568,000***	***$2,585,000***	***$2,602,000***	***$3,503,000***
Annual Cash Flow	**($2,295,000)**	**$498,000**	**$505,000**	**$512,000**	**$520,000**	**$519,000**	**$535,000**	**$543,000**	**$551,000**	**$559,000**	**($302,000)**	**$575,000**	**$583,000**	**$592,000**	**$600,000**	**$601,000**	**$619,000**	**$629,000**	**$639,000**	**$649,000**	**($209,000)**	**$669,000**	**$678,000**	**$688,000**	**$698,000**	**$700,000**	**$718,000**	**$729,000**	**$739,000**	**$749,000**	**$1,169,000**
Cumulative Cash Flow	**($2,295,000)**	**($1,796,000)**	**($1,292,000)**	**($780,000)**	**($260,000)**	**$259,000**	**$793,000**	**$1,336,000**	**$1,887,000**	**$2,445,000**	**$2,144,000**	**$2,719,000**	**$3,302,000**	**$3,894,000**	**$4,494,000**	**$5,095,000**	**$5,715,000**	**$6,344,000**	**$6,983,000**	**$7,632,000**	**$7,423,000**	**$8,092,000**	**$8,771,000**	**$9,459,000**	**$10,157,000**	**$10,857,000**	**$11,575,000**	**$12,303,000**	**$13,042,000**	**$13,792,000**	**$14,961,000**

Table D-3. Operating Revenues and Expenses for RV Park

	Year																														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
REVENUES BY OPERATING DEPARTMENT																															
Registrations	$0	$468,000	$474,000	$480,000	$486,000	$493,000	$499,000	$506,000	$512,000	$519,000	$525,000	$532,000	$539,000	$546,000	$553,000	$561,000	$568,000	$575,000	$583,000	$590,000	$598,000	$605,000	$612,000	$620,000	$627,000	$635,000	$643,000	$650,000	$658,000	$666,000	$674,000
Store Sales	$0	$95,000	$96,000	$98,000	$99,000	$100,000	$102,000	$103,000	$104,000	$106,000	$107,000	$108,000	$110,000	$111,000	$113,000	$114,000	$116,000	$117,000	$119,000	$120,000	$122,000	$123,000	$125,000	$126,000	$128,000	$129,000	$131,000	$132,000	$134,000	$136,000	$137,000
Other Income	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Operating Revenues	***$0***	***$563,000***	***$570,000***	***$578,000***	***$585,000***	***$593,000***	***$601,000***	***$608,000***	***$616,000***	***$624,000***	***$632,000***	***$641,000***	***$649,000***	***$657,000***	***$666,000***	***$675,000***	***$683,000***	***$692,000***	***$701,000***	***$710,000***	***$720,000***	***$728,000***	***$737,000***	***$746,000***	***$755,000***	***$764,000***	***$774,000***	***$783,000***	***$792,000***	***$802,000***	***$812,000***
EXPENSES	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Cost of Sales	$0	$55,000	$56,000	$56,000	$57,000	$58,000	$58,000	$59,000	$60,000	$61,000	$62,000	$62,000	$63,000	$64,000	$65,000	$66,000	$67,000	$67,000	$68,000	$69,000	$70,000	$71,000	$72,000	$73,000	$73,000	$74,000	$75,000	$76,000	$77,000	$78,000	$79,000
Personnel Expenses	$0	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000
Maintenance & Repair	$0	$60,000	$60,000	$61,000	$62,000	$63,000	$64,000	$64,000	$65,000	$66,000	$67,000	$68,000	$69,000	$70,000	$71,000	$71,000	$72,000	$73,000	$74,000	$75,000	$76,000	$77,000	$78,000	$79,000	$80,000	$81,000	$82,000	$83,000	$84,000	$85,000	$86,000
Other Operating	$0	$135,000	$137,000	$138,000	$140,000	$142,000	$144,000	$146,000	$148,000	$150,000	$151,000	$153,000	$155,000	$157,000	$159,000	$162,000	$164,000	$166,000	$168,000	$170,000	$172,000	$174,000	$177,000	$179,000	$181,000	$183,000	$185,000	$187,000	$190,000	$192,000	$194,000
Insurance	$0	$21,000	$21,000	$21,000	$21,000	$21,000	$21,000	$21,000	$21,000	$21,000	$21,000	$21,000	$21,000	$21,000	$21,000	$21,000	$21,000	$21,000	$21,000	$21,000	$21,000	$21,000	$21,000	$21,000	$21,000	$21,000	$21,000	$21,000	$21,000	$21,000	$21,000
Franchise Fee	$0	$23,000	$23,000	$23,000	$23,000	$24,000	$24,000	$24,000	$25,000	$25,000	$25,000	$26,000	$26,000	$26,000	$27,000	$27,000	$27,000	$28,000	$28,000	$28,000	$29,000	$29,000	$29,000	$30,000	$30,000	$31,000	$31,000	$31,000	$32,000	$32,000	$32,000
Annual Lease	$0	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000
Total Operating Expenses	***$0***	***$414,000***	***$417,000***	***$421,000***	***$424,000***	***$428,000***	***$432,000***	***$436,000***	***$439,000***	***$443,000***	***$447,000***	***$451,000***	***$455,000***	***$459,000***	***$463,000***	***$467,000***	***$472,000***	***$476,000***	***$480,000***	***$485,000***	***$489,000***	***$493,000***	***$498,000***	***$502,000***	***$506,000***	***$511,000***	***$515,000***	***$520,000***	***$524,000***	***$529,000***	***$534,000***
Income Taxes (Federal & State)	$0	$27,000	$28,000	$30,000	$32,000	$34,000	$36,000	$38,000	$39,000	$41,000	$43,000	$45,000	$48,000	$50,000	$52,000	$54,000	$56,000	$58,000	$60,000	$63,000	$65,000	$67,000	$69,000	$72,000	$74,000	$76,000	$78,000	$81,000	$83,000	$85,000	$88,000
Depreciation	$0	$16,000	$16,000	$16,000	$16,000	$16,000	$16,000	$16,000	$16,000	$16,000	$16,000	$16,000	$16,000	$16,000	$16,000	$16,000	$16,000	$16,000	$16,000	$16,000	$16,000	$16,000	$16,000	$16,000	$16,000	$16,000	$16,000	$16,000	$16,000	$16,000	$16,000
Interest	$18,000	$43,000	$43,000	$43,000	$43,000	$43,000	$43,000	$43,000	$43,000	$43,000	$43,000	$43,000	$43,000	$43,000	$43,000	$43,000	$43,000	$43,000	$43,000	$43,000	$43,000	$43,000	$43,000	$43,000	$43,000	$43,000	$43,000	$43,000	$43,000	$43,000	$43,000
Total Expenses	***$18,000***	***$500,000***	***$505,000***	***$510,000***	***$516,000***	***$521,000***	***$527,000***	***$533,000***	***$538,000***	***$544,000***	***$550,000***	***$556,000***	***$562,000***	***$568,000***	***$575,000***	***$581,000***	***$587,000***	***$594,000***	***$600,000***	***$607,000***	***$614,000***	***$620,000***	***$627,000***	***$633,000***	***$640,000***	***$646,000***	***$653,000***	***$660,000***	***$667,000***	***$674,000***	***$681,000***
EBITDA	**$0**	**$149,000**	**$153,000**	**$157,000**	**$161,000**	**$165,000**	**$169,000**	**$173,000**	**$177,000**	**$181,000**	**$185,000**	**$190,000**	**$194,000**	**$198,000**	**$203,000**	**$207,000**	**$212,000**	**$216,000**	**$221,000**	**$226,000**	**$230,000**	**$235,000**	**$240,000**	**$244,000**	**$249,000**	**$254,000**	**$258,000**	**$263,000**	**$268,000**	**$273,000**	**$278,000**
Net Profit	**($18,000)**	**$63,000**	**$65,000**	**$68,000**	**$70,000**	**$72,000**	**$74,000**	**$76,000**	**$78,000**	**$80,000**	**$82,000**	**$85,000**	**$87,000**	**$89,000**	**$91,000**	**$94,000**	**$96,000**	**$99,000**	**$101,000**	**$103,000**	**$106,000**	**$108,000**	**$111,000**	**$113,000**	**$115,000**	**$118,000**	**$120,000**	**$123,000**	**$126,000**	**$128,000**	**$131,000**
Net Profit (% of Revenues)	**--**	**11.2%**	**11.5%**	**11.7%**	**11.9%**	**12.1%**	**12.3%**	**12.5%**	**12.7%**	**12.8%**	**13.0%**	**13.2%**	**13.4%**	**13.6%**	**13.7%**	**13.9%**	**14.1%**	**14.2%**	**14.4%**	**14.6%**	**14.7%**	**14.9%**	**15.0%**	**15.2%**	**15.3%**	**15.4%**	**15.6%**	**15.7%**	**15.8%**	**16.0%**	**16.1%**

Table D-4. Cash-Flow Analysis for RV Park

	Year																														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Cash In																															
Beginning Cash	$0	($224,000)	($151,000)	($75,000)	$2,000	$82,000	$163,000	$247,000	$333,000	$421,000	$511,000	$603,000	$698,000	$794,000	$893,000	$995,000	$1,098,000	$1,204,000	$1,313,000	$1,424,000	$1,537,000	$1,653,000	$1,771,000	$1,891,000	$2,014,000	$2,140,000	$2,268,000	$2,398,000	$2,531,000	$2,666,000	$2,804,000
Sales	$0	$563,000	$570,000	$578,000	$585,000	$593,000	$601,000	$608,000	$616,000	$624,000	$632,000	$641,000	$649,000	$657,000	$666,000	$675,000	$683,000	$692,000	$701,000	$710,000	$720,000	$728,000	$737,000	$746,000	$755,000	$764,000	$774,000	$783,000	$792,000	$802,000	$812,000
Other Revenues	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Sale of Assets	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$328,000
Total Available Cash	***$0***	***$339,000***	***$420,000***	***$502,000***	***$587,000***	***$675,000***	***$764,000***	***$855,000***	***$949,000***	***$1,045,000***	***$1,143,000***	***$1,244,000***	***$1,347,000***	***$1,452,000***	***$1,559,000***	***$1,669,000***	***$1,782,000***	***$1,897,000***	***$2,014,000***	***$2,134,000***	***$2,257,000***	***$2,381,000***	***$2,508,000***	***$2,638,000***	***$2,770,000***	***$2,904,000***	***$3,041,000***	***$3,181,000***	***$3,323,000***	***$3,468,000***	***$3,944,000***
Cash Out	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Salaries	$0	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000	$120,000
Other Operating Expenses	$0	$294,000	$297,000	$301,000	$305,000	$308,000	$312,000	$316,000	$320,000	$323,000	$327,000	$331,000	$335,000	$339,000	$343,000	$348,000	$352,000	$356,000	$361,000	$365,000	$369,000	$374,000	$378,000	$382,000	$387,000	$391,000	$395,000	$400,000	$404,000	$409,000	$414,000
Loan Payments	$18,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000
Capital Expenditures	$205,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Tax Payments	$0	$27,000	$28,000	$30,000	$32,000	$34,000	$36,000	$38,000	$39,000	$41,000	$43,000	$45,000	$48,000	$50,000	$52,000	$54,000	$56,000	$58,000	$60,000	$63,000	$65,000	$67,000	$69,000	$72,000	$74,000	$76,000	$78,000	$81,000	$83,000	$85,000	$88,000
Total Cash Out	***$224,000***	***$490,000***	***$495,000***	***$500,000***	***$506,000***	***$511,000***	***$517,000***	***$523,000***	***$528,000***	***$534,000***	***$540,000***	***$546,000***	***$552,000***	***$558,000***	***$565,000***	***$571,000***	***$577,000***	***$584,000***	***$590,000***	***$597,000***	***$604,000***	***$610,000***	***$617,000***	***$623,000***	***$630,000***	***$636,000***	***$643,000***	***$650,000***	***$657,000***	***$664,000***	***$671,000***
Annual Cash Flow	**($224,000)**	**$73,000**	**$75,000**	**$77,000**	**$80,000**	**$82,000**	**$84,000**	**$86,000**	**$88,000**	**$90,000**	**$92,000**	**$95,000**	**$97,000**	**$99,000**	**$101,000**	**$104,000**	**$106,000**	**$108,000**	**$111,000**	**$113,000**	**$116,000**	**$118,000**	**$121,000**	**$123,000**	**$125,000**	**$128,000**	**$130,000**	**$133,000**	**$135,000**	**$138,000**	**$469,000**
Cumulative Cash Flow	**($224,000)**	**($151,000)**	**($75,000)**	**$2,000**	**$82,000**	**$163,000**	**$247,000**	**$333,000**	**$421,000**	**$511,000**	**$603,000**	**$698,000**	**$794,000**	**$893,000**	**$995,000**	**$1,098,000**	**$1,204,000**	**$1,313,000**	**$1,424,000**	**$1,537,000**	**$1,653,000**	**$1,771,000**	**$1,891,000**	**$2,014,000**	**$2,140,000**	**$2,268,000**	**$2,398,000**	**$2,531,000**	**$2,666,000**	**$2,804,000**	**$3,273,000**

Table D-5. Operating Revenues and Expenses for Equestrian Riding Stables

	Year																														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
REVENUES BY OPERATING DEPARTMENT																															
Peak Rental	$0	$251,000	$254,000	$258,000	$261,000	$264,000	$268,000	$271,000	$275,000	$278,000	$282,000	$286,000	$289,000	$293,000	$297,000	$301,000	$305,000	$309,000	$313,000	$317,000	$321,000	$325,000	$329,000	$333,000	$337,000	$341,000	$345,000	$349,000	$353,000	$358,000	$362,000
Off-Peak Rental	$0	$44,000	$45,000	$45,000	$46,000	$46,000	$47,000	$48,000	$48,000	$49,000	$50,000	$50,000	$51,000	$51,000	$52,000	$53,000	$54,000	$54,000	$55,000	$56,000	$56,000	$57,000	$58,000	$58,000	$59,000	$60,000	$61,000	$61,000	$62,000	$63,000	$64,000
Special Events	$0	$30,000	$30,000	$30,000	$30,000	$30,000	$30,000	$30,000	$30,000	$30,000	$30,000	$30,000	$30,000	$30,000	$30,000	$30,000	$30,000	$30,000	$30,000	$30,000	$30,000	$30,000	$30,000	$30,000	$30,000	$30,000	$30,000	$30,000	$30,000	$30,000	$30,000
Total Operating Revenues	***$0***	***$325,000***	***$329,000***	***$332,000***	***$336,000***	***$340,000***	***$344,000***	***$349,000***	***$353,000***	***$357,000***	***$361,000***	***$365,000***	***$370,000***	***$374,000***	***$379,000***	***$383,000***	***$388,000***	***$392,000***	***$397,000***	***$402,000***	***$407,000***	***$411,000***	***$416,000***	***$421,000***	***$425,000***	***$430,000***	***$435,000***	***$440,000***	***$445,000***	***$450,000***	***$455,000***
EXPENSES	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Hay	$0	$13,000	$13,000	$13,000	$13,000	$14,000	$14,000	$14,000	$14,000	$14,000	$14,000	$15,000	$15,000	$15,000	$15,000	$15,000	$16,000	$16,000	$16,000	$16,000	$16,000	$17,000	$17,000	$17,000	$17,000	$17,000	$18,000	$18,000	$18,000	$18,000	$19,000
Bedding	$0	$5,000	$5,000	$6,000	$6,000	$6,000	$6,000	$6,000	$6,000	$6,000	$6,000	$6,000	$6,000	$6,000	$6,000	$6,000	$7,000	$7,000	$7,000	$7,000	$7,000	$7,000	$7,000	$7,000	$7,000	$7,000	$7,000	$8,000	$8,000	$8,000	$8,000
Stall Cleaning	$0	$16,000	$16,000	$17,000	$17,000	$17,000	$17,000	$18,000	$18,000	$18,000	$18,000	$18,000	$19,000	$19,000	$19,000	$19,000	$20,000	$20,000	$20,000	$20,000	$21,000	$21,000	$21,000	$21,000	$22,000	$22,000	$22,000	$23,000	$23,000	$23,000	$23,000
Vet / Farrier	$0	$3,000	$3,000	$3,000	$3,000	$3,000	$3,000	$3,000	$3,000	$3,000	$3,000	$3,000	$3,000	$3,000	$3,000	$3,000	$3,000	$3,000	$3,000	$3,000	$3,000	$3,000	$3,000	$3,000	$3,000	$3,000	$4,000	$4,000	$4,000	$4,000	$4,000
Insurance	$0	$4,000	$4,000	$4,000	$4,000	$4,000	$4,000	$4,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$6,000	$6,000	$6,000	$6,000	$6,000	$6,000	$6,000
Manure Removal	$0	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$6,000	$6,000	$6,000	$6,000	$6,000	$6,000	$6,000	$6,000	$6,000	$6,000	$6,000	$6,000	$6,000	$7,000	$7,000	$7,000	$7,000	$7,000	$7,000	$7,000
Telephone	$0	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000
Utilities	$0	$13,000	$13,000	$13,000	$14,000	$14,000	$14,000	$14,000	$14,000	$14,000	$15,000	$15,000	$15,000	$15,000	$15,000	$16,000	$16,000	$16,000	$16,000	$16,000	$17,000	$17,000	$17,000	$17,000	$17,000	$18,000	$18,000	$18,000	$18,000	$19,000	$19,000
Office	$0	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$2,000	$2,000	$2,000	$2,000	$2,000	$2,000	$2,000	$2,000	$2,000	$2,000	$2,000	$2,000
Repair / Maint.	$0	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$6,000	$6,000	$6,000	$6,000	$6,000	$6,000	$6,000	$6,000	$6,000	$6,000	$6,000	$6,000	$6,000	$7,000	$7,000	$7,000	$7,000	$7,000	$7,000
Personnel Costs	$0	$198,000	$198,000	$198,000	$198,000	$198,000	$198,000	$198,000	$198,000	$198,000	$198,000	$198,000	$198,000	$198,000	$198,000	$198,000	$198,000	$198,000	$198,000	$198,000	$198,000	$198,000	$198,000	$198,000	$198,000	$198,000	$198,000	$198,000	$198,000	$198,000	$198,000
Franchise Fee	$0	$13,000	$13,000	$13,000	$13,000	$14,000	$14,000	$14,000	$14,000	$14,000	$14,000	$15,000	$15,000	$15,000	$15,000	$15,000	$16,000	$16,000	$16,000	$16,000	$16,000	$16,000	$17,000	$17,000	$17,000	$17,000	$17,000	$18,000	$18,000	$18,000	$18,000
Annual Lease	$0	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000
Total Operating Expenses	***$0***	***$277,000***	***$278,000***	***$279,000***	***$280,000***	***$282,000***	***$283,000***	***$284,000***	***$285,000***	***$286,000***	***$287,000***	***$288,000***	***$289,000***	***$290,000***	***$292,000***	***$293,000***	***$294,000***	***$295,000***	***$296,000***	***$298,000***	***$299,000***	***$300,000***	***$301,000***	***$303,000***	***$304,000***	***$305,000***	***$306,000***	***$308,000***	***$309,000***	***$310,000***	***$312,000***
Income Taxes (Federal & State)	$0	$1,000	$2,000	$3,000	$3,000	$4,000	$5,000	$6,000	$6,000	$7,000	$8,000	$9,000	$9,000	$10,000	$11,000	$12,000	$13,000	$14,000	$15,000	$16,000	$17,000	$19,000	$20,000	$21,000	$23,000	$24,000	$26,000	$27,000	$29,000	$30,000	$32,000
Depreciation	$0	$13,000	$13,000	$13,000	$13,000	$13,000	$13,000	$13,000	$13,000	$13,000	$13,000	$13,000	$13,000	$13,000	$13,000	$13,000	$13,000	$13,000	$13,000	$13,000	$13,000	$13,000	$13,000	$13,000	$13,000	$13,000	$13,000	$13,000	$13,000	$13,000	$13,000
Interest	$12,000	$28,000	$28,000	$28,000	$28,000	$28,000	$28,000	$28,000	$28,000	$28,000	$28,000	$28,000	$28,000	$28,000	$28,000	$28,000	$28,000	$28,000	$28,000	$28,000	$28,000	$28,000	$28,000	$28,000	$28,000	$28,000	$28,000	$28,000	$28,000	$28,000	$28,000
Total Expenses	***$12,000***	***$320,000***	***$322,000***	***$324,000***	***$325,000***	***$327,000***	***$329,000***	***$331,000***	***$333,000***	***$334,000***	***$336,000***	***$338,000***	***$340,000***	***$342,000***	***$344,000***	***$346,000***	***$348,000***	***$351,000***	***$353,000***	***$356,000***	***$358,000***	***$360,000***	***$363,000***	***$365,000***	***$368,000***	***$371,000***	***$374,000***	***$376,000***	***$379,000***	***$382,000***	***$385,000***
EBITDA	**$0**	**$47,000**	**$50,000**	**$53,000**	**$56,000**	**$59,000**	**$62,000**	**$65,000**	**$68,000**	**$71,000**	**$74,000**	**$77,000**	**$81,000**	**$84,000**	**$87,000**	**$90,000**	**$94,000**	**$97,000**	**$101,000**	**$104,000**	**$108,000**	**$111,000**	**$115,000**	**$118,000**	**$122,000**	**$125,000**	**$129,000**	**$132,000**	**$136,000**	**$140,000**	**$143,000**
Net Profit	**($12,000)**	**$4,000**	**$6,000**	**$9,000**	**$11,000**	**$13,000**	**$15,000**	**$18,000**	**$20,000**	**$22,000**	**$25,000**	**$27,000**	**$30,000**	**$32,000**	**$35,000**	**$37,000**	**$40,000**	**$42,000**	**$44,000**	**$46,000**	**$49,000**	**$51,000**	**$53,000**	**$55,000**	**$57,000**	**$59,000**	**$62,000**	**$64,000**	**$66,000**	**$68,000**	**$70,000**
Net Profit (% of Revenues)	**--**	**1.3%**	**2.0%**	**2.6%**	**3.2%**	**3.9%**	**4.5%**	**5.1%**	**5.7%**	**6.3%**	**6.9%**	**7.4%**	**8.0%**	**8.6%**	**9.1%**	**9.7%**	**10.2%**	**10.7%**	**11.1%**	**11.6%**	**12.0%**	**12.4%**	**12.8%**	**13.2%**	**13.5%**	**13.8%**	**14.1%**	**14.5%**	**14.8%**	**15.1%**	**15.3%**

Table D-6. Cash-Flow Analysis for Equestrian Riding Stables

	Year																														
	0	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**
Cash In																															
Beginning Cash	0	(147,000)	(134,000)	(118,000)	(101,000)	(81,000)	(59,000)	(34,000)	(8,000)	21,000	53,000	86,000	122,000	161,000	202,000	246,000	292,000	327,000	378,000	431,000	487,000	544,000	604,000	667,000	731,000	798,000	866,000	936,000	1,009,000	1,084,000	1,160,000
Sales	0	325,000	329,000	332,000	336,000	340,000	344,000	349,000	353,000	357,000	361,000	365,000	370,000	374,000	379,000	383,000	388,000	392,000	397,000	402,000	407,000	411,000	416,000	421,000	425,000	430,000	435,000	440,000	445,000	450,000	455,000
Other Revenues	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sale of Assets	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	195,000
Total Available Cash	***0***	***178,000***	***195,000***	***214,000***	***236,000***	***259,000***	***286,000***	***314,000***	***345,000***	***378,000***	***414,000***	***452,000***	***492,000***	***535,000***	***581,000***	***629,000***	***680,000***	***720,000***	***775,000***	***833,000***	***893,000***	***956,000***	***1,020,000***	***1,087,000***	***1,157,000***	***1,228,000***	***1,301,000***	***1,376,000***	***1,454,000***	***1,534,000***	***1,810,000***
Cash Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Salaries	0	198,000	198,000	198,000	198,000	198,000	198,000	198,000	198,000	198,000	198,000	198,000	198,000	198,000	198,000	198,000	198,000	198,000	198,000	198,000	198,000	198,000	198,000	198,000	198,000	198,000	198,000	198,000	198,000	198,000	198,000
Other Operating Expenses	0	80,000	81,000	82,000	83,000	84,000	85,000	86,000	87,000	88,000	89,000	90,000	92,000	93,000	94,000	95,000	96,000	98,000	99,000	100,000	101,000	102,000	104,000	105,000	106,000	107,000	109,000	110,000	111,000	113,000	114,000
Loan Payments	12,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000	33,000
Capital Expenditures	135,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tax Payments	0	1,000	2,000	3,000	3,000	4,000	5,000	6,000	6,000	7,000	8,000	9,000	9,000	10,000	11,000	12,000	13,000	14,000	15,000	16,000	17,000	19,000	20,000	21,000	23,000	24,000	26,000	27,000	29,000	30,000	32,000
Total Cash Out	***147,000***	***311,000***	***313,000***	***315,000***	***317,000***	***318,000***	***320,000***	***322,000***	***324,000***	***326,000***	***327,000***	***329,000***	***331,000***	***333,000***	***335,000***	***337,000***	***352,000***	***342,000***	***344,000***	***347,000***	***349,000***	***351,000***	***354,000***	***356,000***	***359,000***	***362,000***	***365,000***	***367,000***	***370,000***	***373,000***	***376,000***
Annual Cash Flow	**(147,000)**	**13,000**	**15,000**	**18,000**	**20,000**	**22,000**	**24,000**	**27,000**	**29,000**	**31,000**	**34,000**	**36,000**	**39,000**	**41,000**	**44,000**	**46,000**	**35,000**	**51,000**	**53,000**	**55,000**	**58,000**	**60,000**	**62,000**	**64,000**	**66,000**	**68,000**	**70,000**	**73,000**	**75,000**	**77,000**	**274,000**
Cumalative Cash Flow	**(147,000)**	**(134,000)**	**(118,000)**	**(101,000)**	**(81,000)**	**(59,000)**	**(34,000)**	**(8,000)**	**21,000**	**53,000**	**86,000**	**122,000**	**161,000**	**202,000**	**246,000**	**292,000**	**327,000**	**378,000**	**431,000**	**487,000**	**544,000**	**604,000**	**667,000**	**731,000**	**798,000**	**866,000**	**936,000**	**1,009,000**	**1,084,000**	**1,160,000**	**1,434,000**