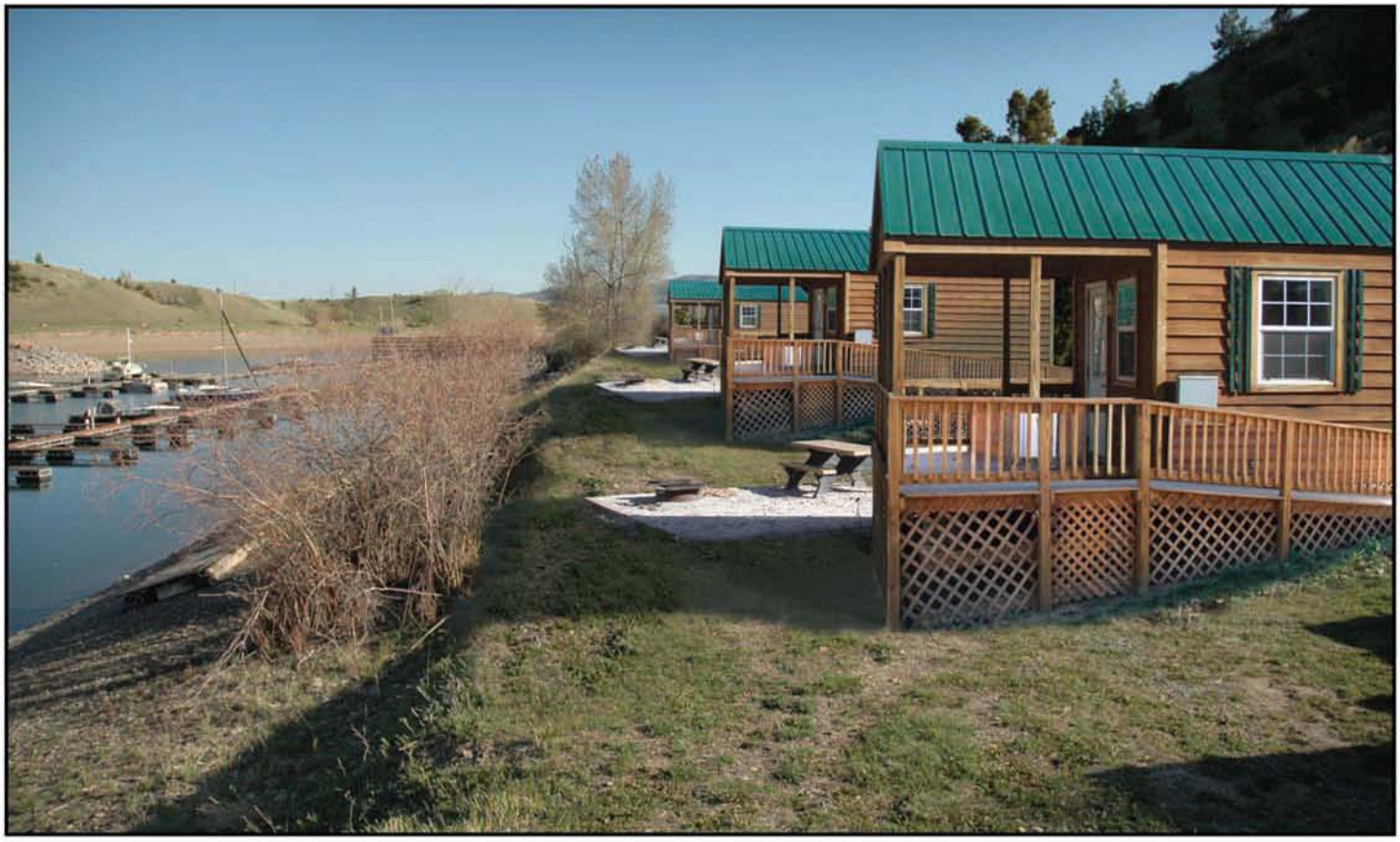
Potential Infrastructure Alternatives, Facilities and Services for the **KIM'S MARINA CONCESSION AREA**



Prepared for the Bureau of Reclamation
Montana Area Office

by

Aukerman, Haas & Associates LLC.

October 2008

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Acknowledgments

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I. Introduction

In compliance with the current concession contract for Kim's Marina, the Montana Area Office of the Bureau of Reclamation (Reclamation) is conducting a recreation analysis of facilities and services that could be provided to replace 12 existing mobile homes.

II. Report Purpose

The purpose of this report is to provide a comparison of the technical and financial viability of several alternatives consisting of combinations of facilities and services identified in the first phase of this project in the May 2008 Public Comment Summary and Analysis report.

III. Desired Outcome

The desired outcome of this contracted effort is to assist Reclamation and the concessionaires in determining the type of facilities and services that should be provided at Kim's Marina in place of the mobile homes. The report will provide information on both the financial and technical viability of alternative facilities and services to the concession operators to assist them in making sound business decisions. The alternatives describe combinations of facilities and services that are in the public demand and comply with Reclamation policy.

IV. Process

Facilities and services to be analyzed were selected based upon the following:

* Public input, interest and demand from the May 2008 Public Comment Summary and Analysis Report
* Input from Reclamation on facilities and services that are in compliance with Reclamation Policy
* Kim's Marina operators' input on their interests and capabilities in providing selected facilities and services
* Study and knowledge of similar facilities and services at other areas, and their financial and technical viability

Technical viability, i.e. logistics of on-the-ground implementation of each of the potential replacement facilities and services was determined by:

* Studying site maps and existing Marina design and location drawings
* On site study of space, topography and appropriate locations for facilities
* On site review of locations of utilities (water, electric, sewer) and their accessibility, capability and proximity to facilities and services being studied
* Considering public health and safety and budgeting for water, electric and sewer infrastructure for each facility being considered
* Assessing the physical and visual impacts of proposed facilities

Financial viability, i.e. the ability of the facility or service to experience a reasonable rate of return on the monetary investment in capitol improvements over the term of the contract (20 years) was determined by conducting a Life Cycle Cost Analysis for each Alternative. The Life Cycle Cost Analysis consisted of:

* Determining the number, size and possible infrastructure needs of each facility and service
* Projecting the Capitol Expenditures, Operating Costs, and Revenue for each facility and service
* Conducting an Investment Analysis
* Conducting a Break-Even Analysis

V. Facilities and services selected for analysis and Marina site map showing Marina and facility locations:

Facilities and Services:

* Group Lodge (Figure 3 page 12)
* Enclosed Dry Boat Storage (Figure 4 page 13)
* Campsites (urban full service) (Figure 5 page 14
* Park Model Mobile Camper Cabins (Figures 6 & 7 pages 15 & 16)
* Management of Reclamation Campground
* Group Pavilion (Figures 8 & 9 pages 17 & 18)
* Reclamation Group Pavilion Add-On and Management (Figure 10 page 19)
* Dock (Figure 11 page 20)

Maps of Marina location and existing and suggested facilities locations:

FIGURE 1: Location Map
Kim's Marina and RV Park
Canyon Ferry Reservoir, Montana

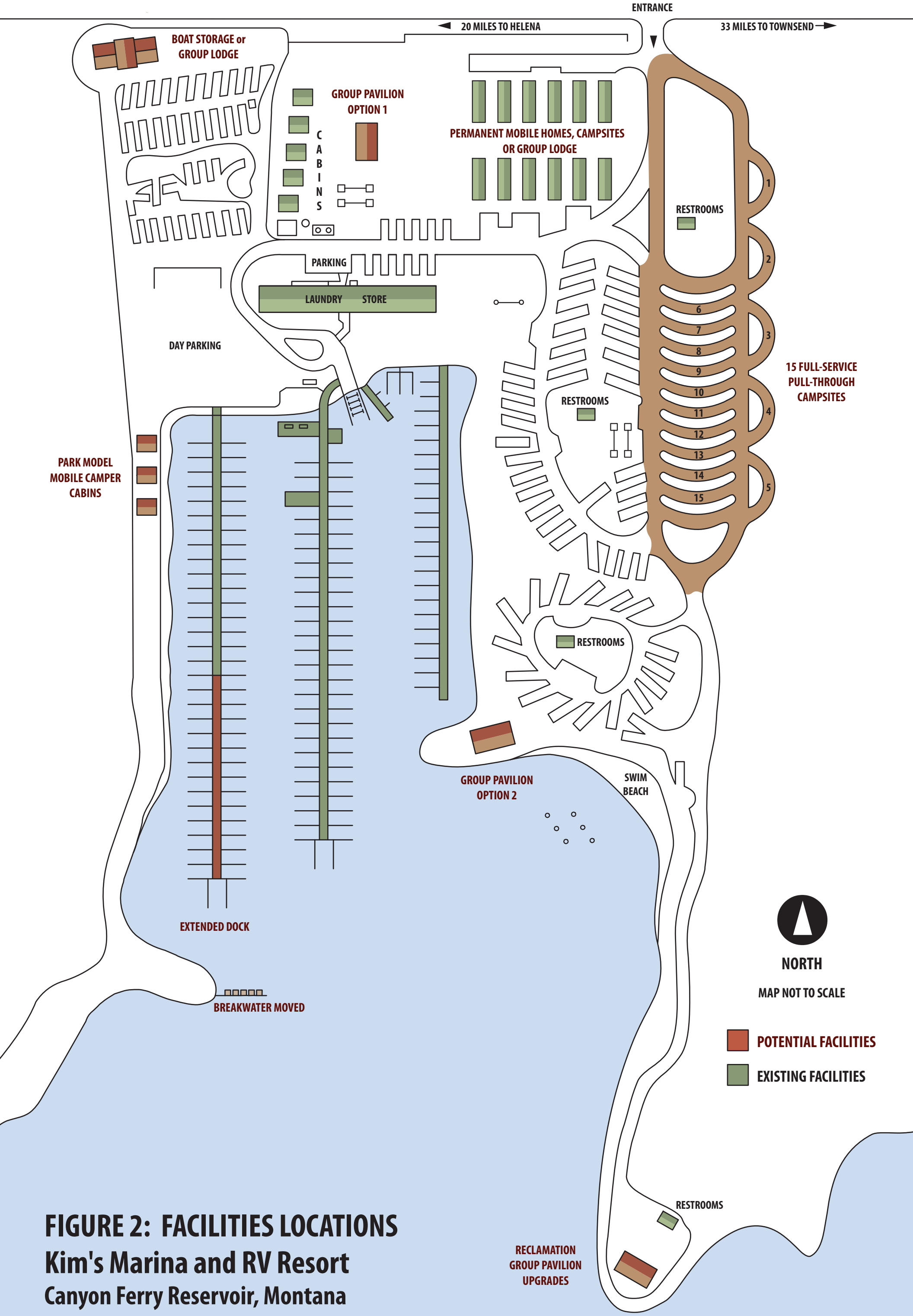


FIGURE 2: FACILITIES LOCATIONS

Kim's Marina and RV Resort

Canyon Ferry Reservoir, Montana

VI. Description of potential facilities and services and infrastructure needs:

Group Lodge

Description and Function:

A group lodge could serve many purposes, be luxurious to very rustic and be any size. The type of lodge presented for this analysis was selected because of its success in other park and recreation locations and the public demand elsewhere for this type of facility. This lodge could be an approximately 3000 + sq. ft. single story semi-rustic building. As analyzed, it would have 6 bedrooms and 2 bathrooms accommodating 12-24 people. Three bedrooms and one bath would be located in each of two wings that adjoin a large central room. This room, with large picture windows overlooking the marina and cove and fireplace, would serve as an all purpose room for meetings and other functions such as family reunions, gatherings of friends, company meetings, college department retreats, small weddings etc. A full-service kitchen would allow for cooking and serving of catered foods.

Locations:

There are a number of possible sites for this facility. The sites described below are best suited for access to infrastructure and the Marina amenities.

Site # 1 is located on the NW corner of the marina just off Canyon Ferry Road/HWY 284. It has a recently leveled area that was previously used for storage of boats, equipment and debris. This is high ground overlooking the cove and Marina. It is close to power, water and the other amenities of the Marina. These include laundry facilities, shower and changing rooms, store, rentals etc. A group pavilion on the Marina could serve the lodge for outdoor BBQ's, picnics etc. Across the road to the east is a restaurant and bar for those who do not wish to provide their own food and drink.

Site # 2 is located between the existing trailers and cabins where the tennis court is now located. Views of the water are obstructed by the Marina store. However all marina amenities and infrastructure are immediately accessible.

Site # 3 is the area that now accommodates the trailers. This site already has the infrastructure needed for the group lodge, plus all of the other amenities listed under site one and two.

Infrastructure needs:

If the lodge was located on Site # 3, the site of the existing trailers, existing infrastructure could be used. Locating the lodge on Site # 1 or 2 would require water and electricity 110/220 to be extended from existing sources, which are short distances from the proposed facility. There is also a power source (pole and line) that could probably be connected to right next to the Site # 1. This has been budgeted for in the Life Cycle Cost

Analysis under “contingencies”. Adequacy of existing sewage facilities is a concern for the entire Marina. The lodge would require a sewer system with a septic tank and drain, with a minimum cost estimated at $15,000. This has been budgeted for under “unlisted items”. ADA accessibility has also been budgeted for under “contingencies”.

Enclosed Dry Boat Storage

Description and Function:

This facility was selected to provide storage and protection from the elements for a small number of boats, approximately 22. Depending on demand, the facility could be expanded as needed. Based upon discussions with and estimates from nationally recognized and experienced manufacturing companies, a steel pre-manufactured building 60 X 100 feet would be needed to store the boats. Two thirty foot doors on the sides, a 1-12 foot pitch roof and a wind braced end complete the basic structure. Piers to anchor the building and a hard packed gravel floor are also included in the cost estimate for the building. Electric (110) and water are included in the cost estimate under “contingencies”, and delivery costs are under “mobilization”. A similar building for boat storage was recently built and sold for $38,255 for boat storage in Minnesota.

Location:

Site # 1, described previously for the Group Lodge at the NW corner of the Marina, would be best suited for this Storage facility. The site is located close to the road and would not block the views of other campers. It is already leveled, close to electricity and water, and provides easy access to the Marina boat launch and dock facilities.

Infrastructure needs:

Connecting to a 110-power source and to a water line are the only infrastructure needs. These services are already nearby.

Campsites (Urban/Full Service)

Description and Function:

A full service campground would serve mainly as a tourist attraction and long term destination for campers, such as “snow birds”, seeking an extended stay in a cool climate and a water based recreation location. These campers seek and require all the full services found at home. A full service urban campsite consists of a hardened pad large enough to accommodate today’s largest fully self-contained motor homes and fifth wheel campers. Connections for water, sewer drains and power are provided. Power consists of 20, 30 and 50 amp plug-ins from a pedestal next to the pad. Other amenities are numerous. Those amenities commonly provided are patio pad, high speed satellite internet computer hookups, phone and television connections, fire ring, picnic table, tent pad, shade shelters and/or shade trees and space for a second vehicle and boat parking.

Fifteen of these campsites are considered for this study. This number was determined by the space available. Three thousand dollars has been added to the cost of one of the fifteen campsites to meet ADA requirements.

Locations:

Site # 1 is the grassy open space and ball-field area to the left of the Marina entrance, below the existing toilet facility. This site is fairly level with an existing access road. A power line and pole are on site and water serves campsites across the road. Showers, laundry, store, boat launch and other amenities are within a short walk. The Marina cove with swim beach is also close by. There are also views of the water through trees and other campsites. A campground design already exists for this location.

Site # 2 is the area containing the existing trailers. This site already contains all of the infrastructure needed, including water, sewer, electric, pads and proximity to all of the Marina amenities.

Infrastructure needs:

Site # 1 would require connecting to a power source, such as the existing power line/ pole on site. Pedestals containing plug-ins for 20, 30 and 50 amps would be located at each campsite. A water source exists across the road and approximately half way down the proposed site. Connections to each campsite would be required. Sewage connections at each campsite would require a new sewer system with septic tank and drain. The approximate $15,000 minimum expense for this has been included under “unlisted items” in the Life Cycle Cost Analysis.

Another possibility for sewage treatment is to develop an entirely new system at Kim’s that would handle sewage not only for the campsites but for all of the existing and proposed on-site facilities. An all-inclusive system may be required to handle sewage from the existing system that is questionably already over capacity. Options for a sewage system were developed by Aukerman, Haas & Associates in 2002 for another recreation facilities financial feasibility analysis. The options and costs are based on sewer systems designed to handle a 150 campsite campground that includes a central building with toilets and showers, two SST/CXT type toilets, and a dump station. The sewage capacity needs and system for Kim’s should be somewhat similar. However, local County requirements may call for a different system. The AHA options and costs are shown in Appendix C. In order to update financial figures, a minimum of 3% per year for 6 years, or 18%, needs to be added to 2002 figures.

Site # 2 would utilize the existing infrastructure of the replaced trailers, altered to fit and connect to the campers. Pedestals with 20, 30, and 50-amp power plug-ins would be needed.

Park Model Mobile Camper Cabins

Description and Function:

Five full service cabins already exist at Kim's. The managers have no desire to take on the additional work of everyday linen service and maintenance from having more of this type of cabin. However, the Park Model Mobile Camper Cabins being considered in this study serve a different recreationist. They are relatively maintenance free and serve a client seeking a more rustic, self reliant and less expensive recreation experience. The three proposed cabins are basic, containing mainly sleeping quarters and sitting areas and providing 110 electric power. The cabins would sit on level areas. Three thousand dollars has been added to the capitol expenditures to meet ADA requirements for one of the cabins. Additionally, a camping pad, fire ring and picnic table would be adjacent to each cabin. Water would come from a communal faucet serving all cabins. Toilets, showers and laundry facilities are located nearby in the Marina store building. Clients would provide their own bedding, such as sleeping bags, and would agree to basic clean up.

Locations:

The proposed location is on a bench adjacent to and paralleling the water just west of the cove and docks and just south of the day parking area. This location provides easy access, closeness to infrastructure, proximity to the Marina's facilities and services, some separation from other campers, a natural setting and good views of the water.

Infrastructure needs:

The only infrastructure needs are a water line to a central tap and 110 power to the cabins.

Management of Reclamation Campground

Description and Function:

Having Kim's Marina take over management of Court Sheriff campground is a possible partnership with Reclamation. The campground could be managed by Marina operators as a separate concession that returns a separate concession fee to Reclamation. Kim's location, in close proximity to this campground, and the fact that Kim's managers are already managing campgrounds of their own, should help with the success of this endeavor. For Kim's, this would provide additional revenue, an outlet for overflow camping and coordination for campers who are or could be using Kim's facilities and services and this Reclamation Campground. For Reclamation, this would relieve the agency of recreation management responsibilities, possibly save money and time, and help their concessionaire's operation (Kim's Marina) be more successful and sustainable. It would also help Kim's to overcome the loss of revenue from the removal of trailers.

As the manager of this campground, Kim's would typically make campsite reservations, maintain and oversee the campsites and restrooms; purchase and maintain equipment, materials and supplies; collect and account for revenue; do budgeting, coordinate solid waste and sewage removal; organize, train and oversee volunteers, campground hosts and seasonal help; hire and pay seasonal help as needed, and coordinate with and account to Reclamation.

Concession management of a Reclamation campground may lead to an increase in costs for campsites, and may change the public perception of the campground. The increase in cost could temporarily displace some campers while attracting others due to an association of cost with quality. The perception has the potential to displace some current visitors who prefer to camp at Reclamation managed sites and attract others who prefer concession managed sites. This option was not identified by the public, but is a management option presented for financial and administrative consideration.

Locations:

Court Sheriff Campground is located lakeside, just west of Kim's Marina.

Infrastructure needs:

There are no infrastructural needs required from Kim's. However, some capitol equipment expenditures may be necessary for a truck or other vehicles and equipment needed to collect trash, maintain the campground and patrol.

Group Pavilion

Description and Function:

This group pavilion would function as a place for large groups to gather for picnics, BBQ's, weddings, extended family and friends gatherings, church functions, company and business gatherings, Marina patron gatherings and other functions. The structure would be a covered slab partially enclosed on the windward side and possibly having drop down sides to protect against wind, bugs and the elements. Amenities of the facility would include counters, sink with water, electric lighting and electric sockets for plug-ins, propane and /or charcoal grills, fire pit and ADA accessibility. All of this is included in the cost estimate for the Pavilion. Similar facilities also have nearby playground equipment, horseshoes, shuffleboard, volleyball courts etc.

Locations:

Site # 1 is on the existing tennis court between the cabins and the mobile homes. This is close to all infrastructure, and the Marina store and other amenities are across the street. The existing tennis court surface might be used for the floor of the pavilion. This would save money for construction costs. The drawback to this site is that the views of the water are blocked by the Marina store building.

Site # 2 is near the water, just south of the lower restrooms where campsites 140-142 now sit. This is just NW of the swim beach. Restrooms already exist here and space is available for a playground and other recreation amenities. The view to the lake is good, and the swim beach is close.

Infrastructure needs:

Site # 1 – Connections to existing water and power is all that is needed.

Site # 2 -Water and 110 electric power would need to be extended approximately 100 yards from the existing or proposed full-service campsites. If a water line was extended to the Cave Bay group use shelter on the point, then less than 100 feet of water line would be required.

Dock

Description and Function:

Another dock would provide the greatest return on investment of any proposed new facilities for the Marina. This facility would be in deeper water, accommodating deep draft and/or larger boats, including sailboats. The silting of the cove and the need to accommodate deep draft boats was a concern expressed in public meetings. The dock would be constructed the same as the existing new docks with 45-75 slips. Some single slips could be provided for larger boats. The dock could be connected to an existing dock. The cost analysis for this report estimates 60 slips. In order for the Marina cove to accommodate this dock, the existing jetty on the east side of the cove would need to be moved out approximately 150 yards to the south of its present location. A line item in the Capital Expenditure section of the Cost Analysis has been included for the jetty.

Locations:

The new dock would sit close to and along the west shoreline of the Marina cove, and would attach to and extend south from the existing dock (see drawing).

Infrastructure needs:

The existing jetty would have to be moved approximately 150 yards to the south of its present location. Some additional fill material would probably be required. The additional fill has been budgeted as a separate line item in the cost analysis. Electricity and water could be accessed from the proposed Park Model Mobile Camper Cabins, or from the existing dock when it receives electric power.

Reclamation Group Pavilion Add-On & Management

Description and Function:

The existing pavilion is in one of the finest locations for views of the lake. It is an excellent facility, with vehicle access and nearby toilets. Adding approximately six-ten feet to the structure would allow room for counter space and a sink with water. Adding electricity with lights and plugs, protection on the side from wind and rain, BBQ grill and fire ring would make the facility much more accommodating and functional for groups, and could create a major demand. These improvements could be made by Reclamation and the facility could be managed by the Marina operators as a separate concession that returns a concession fee to Reclamation. This would be similar to the operation by the Marina managers of Court Sheriff Campground. Another option would be to have the Marina manager make the improvements and manage the facility. Small extended family and friends groups, church groups, business and industry organizations and others could reserve and rent the facilities for their functions. As the Pavilion exists, it has already been used for at least one wedding. Based on experiences of others from renting similar facilities on public lands in the west, the Marina operators, by making the improvements and reserving, renting and managing the pavilion could make a reasonable profit.

Locations:

The pavilion is located on Cave Point, south of the Marina's swim beach.

Infrastructure needs:

A well could be dug to provide water. This is included as a line item in the Cost Analysis under Capital Expenditures. A 110 electric line would need to be extended from the nearest electric power source. A small trap and leach area for gray water disposal would also be required. This facility currently has limited space for parking. Some system for parking at the Marina and shuttling of guest or guests shuttling themselves might be considered, especially for larger groups. The success of Reclamation's shoreline stabilization efforts on Cave Point would be a consideration when planning the add-on to the Pavilion.

VII. Conceptual Sketches and Photo Enhancements of Facilities

FIGURE 3: Kim's Marina and RV Resort Group Lodge

FIGURE 4: Enclosed Dry Boat Storage

FIGURE 5: Campsites (Urban/Full Service)

FIGURE 6: Park Model Mobile Camper Cabins - Front View

FIGURE 7: Park Model Mobile Camper Cabins - Side View

FIGURE 8: Tennis Court Group Pavilion

FIGURE 9: Shelter Point Group Pavilion

FIGURE 10: Cave Point Reclamation Group Pavilion Add-on

FIGURE 11: Dock Extension With New Location of Jetty

VIII. Technical Viability

All of the proposed facilities are technically viable. There are no unusual requirements for construction or infrastructure.

IX. Financial Viability

Based on this Life Cycle Cost analysis, (*see Disclaimer page 33)* all of the proposed facilities and services are financially viable. Although this Cost Analysis assumes that all work will be contracted and/or hired out by the concession operator, much of the construction and management work can be done by the Marina operators. This could save considerable money over the cost estimates presented in this report. For example, existing docks and campsites, similar to the ones proposed, have already been constructed by the Marina operator. The proposed boat storage building is pre-fabricated and comes ready to assemble. According to the manufacturer this is a "simple assembly"**.** Also, from a campground management perspective, the Marina operator already has experience managing campgrounds that already exist on the Marina site.

Definition of Terms:

Mobilization - cost of getting equipment and materials to the site

Unlisted-Items – items not included with basic construction of facility such as drain pipes, new doors etc.

Contingencies – fees and charges such as permits, NEPA documents, power connect fee, water and sewer connect fees etc.

Net Cash Flow (Annual) – cash receipts minus cash expenses over a given period of time. For this (Kim's Marina) study this is a 12 month annual/yearly period of time.

Return on Investment (ROI) - the ratio of money gained or lost on an investment relative to the amount of money invested. This is calculated by subtracting the gain on investment from the cost of the investment and dividing by the cost of investment.

Internal Rate of Return (IRR) - the annualized effective compounded return rate which can be earned on the invested capital, i.e. the yield on the investment. The higher the IRR the more desirable to undertake a project.

Net Present Value (NPV) –measures the excess or shortfall of cash flows, in present value (PV) terms, once financing charges are met. By definition, NPV = Present value of net cash flows

Life Cycle Cost Analysis Summary and Comparisons:

The summary of the Life Cycle Cost Analysis is an Investment Analysis that is presented in two segments. The first segment is a **comparison of financial information across facilities and services** studied. The second segment is a **comparison of financial information across seven alternative groupings of facilities and services**. Both segments show comparisons of facilities and services based upon:
Annual Net Cash Flow - total annual incremental revenue minus total incremental costs
Initial Investment – capital expenditures/total initial collateral costs
Pay Back - years to pay back initial investment
Return On Investment (ROI)
Internal Rate of Return (IRR)
Net Present Value (NPV)

Comparison Across All Facilities and Services

The Facilities and services compared are:
Group Lodge
Enclosed Dry Boat Storage
Campsites (Urban/Full Service)
Park Model Mobile Camper Cabins
Management of Reclamation Campground
Group Pavilion
Dock
Reclamation Group Pavilion Add-On and Management

Table 1. Investment Analysis Comparing All Facilities and Services

	Group Lodge	Boat Storage	Camp-sites	Park Cabins	Campgrd. Mgt	Group Pavilion	Docks	Reclamation Pavilion	Total
Annual Net Cash Flow	$26,400	$12,175	$39,800	$12,700	$18,160	$7,800	$42,550	$6,650	$166,235
Initial Investment	$212,000	$84,000	$361,000	$116,000	$25,000	$46,000	$67,000	$29,000	$940,000
Pay Back (years)	8	7	9	9	1	6	2	4	6
Return on Investment	12.45%	14.49%	11.02%	10.95%	72.64%	16.96%	63.51%	22.93%	17.68%
Internal Rate of Return	10.87%	13.30%	9.09%	8.99%	72.64%	16.10%	63.51%	22.93%	16.91%
Net Present Value	$79,000	$50,000	$78,000	$24,000	$175,000	$40,000	$402,000	$44,000	$892,000

Figure 12. Annual Net Cash Flow for All Facilities & Services

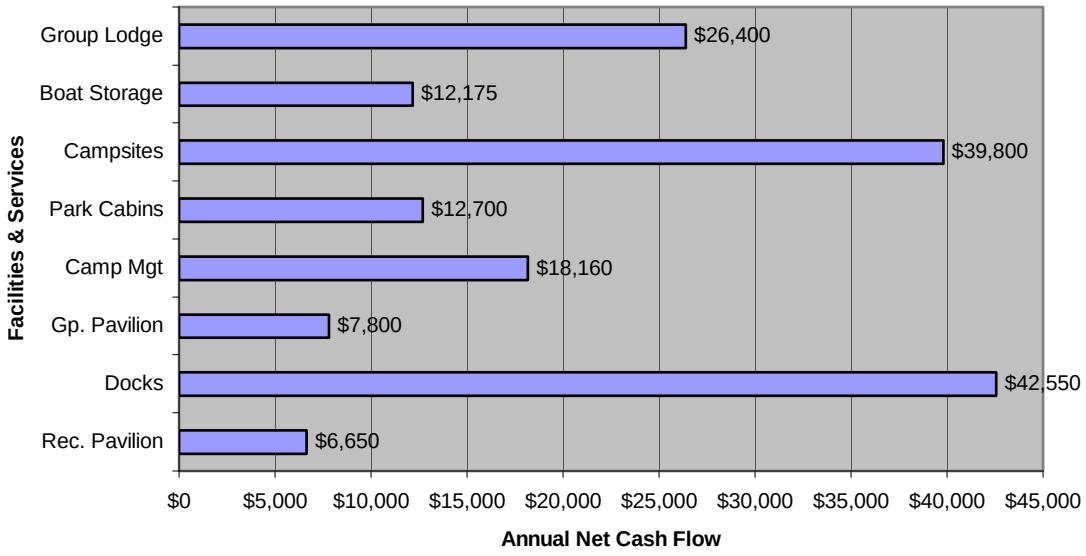


Figure 13. Initial Investment for All Facilities & Services

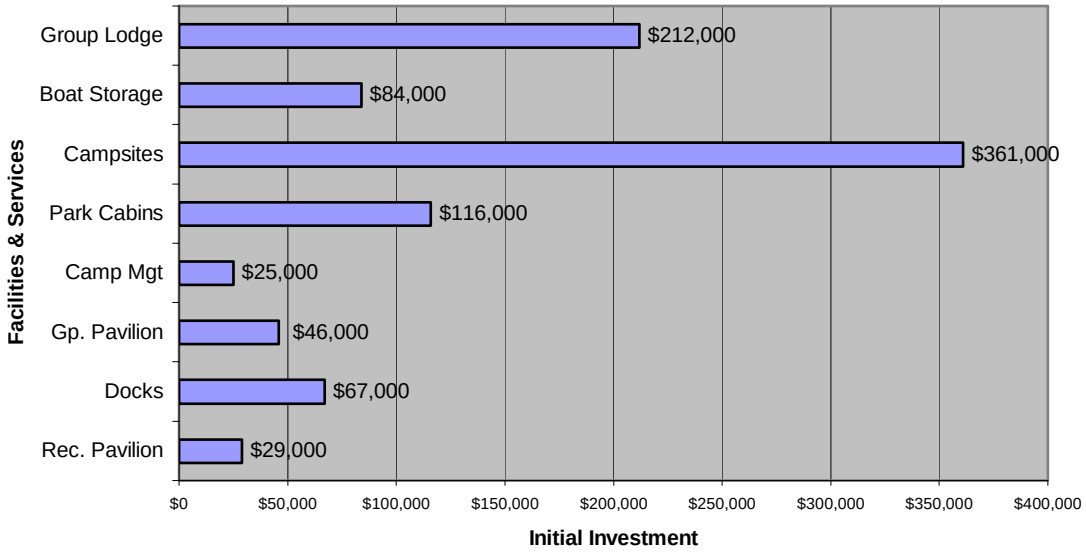


Figure 14. Pay Back (years) for All Facilities & Services

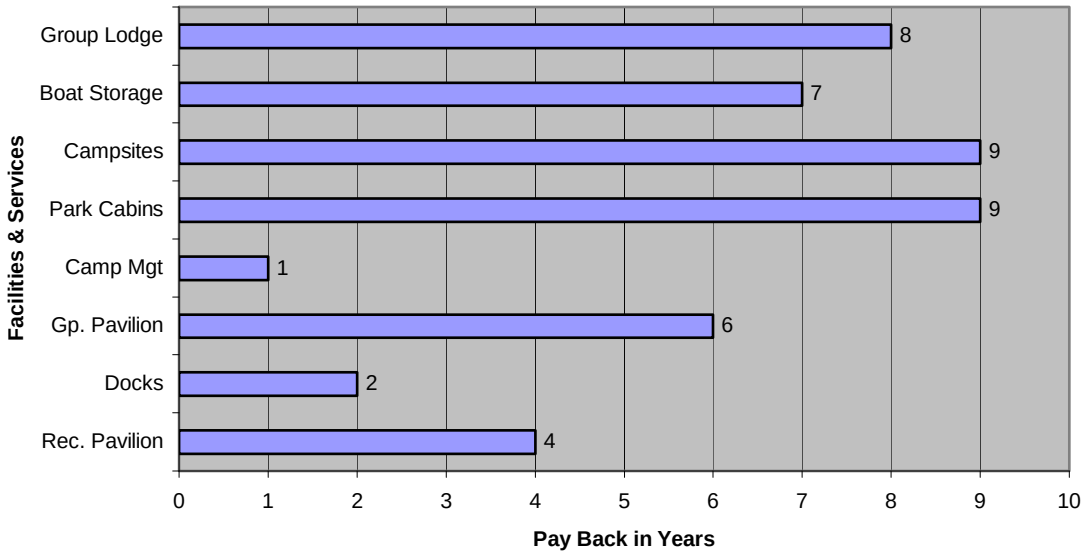


Figure 15. Return on Investment (ROI) for All Facilities & Services

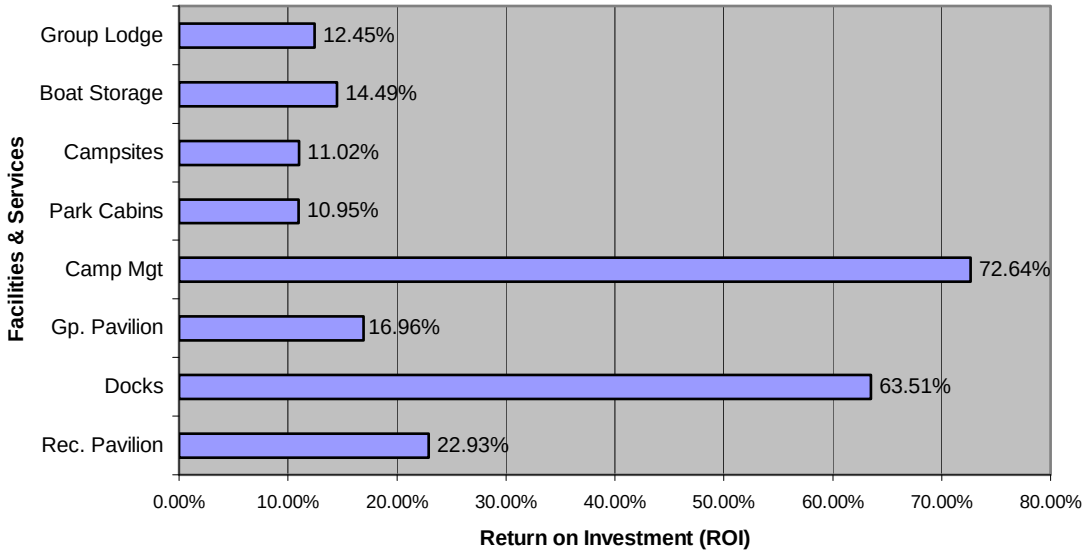


Figure 16. Internal Rate of Return (IRR) for All Facilities & Services

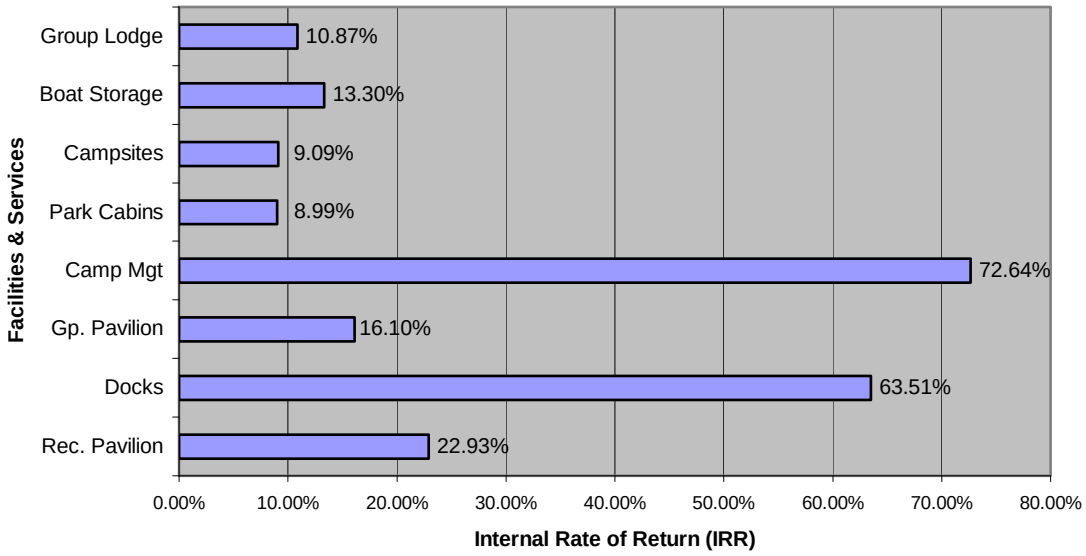
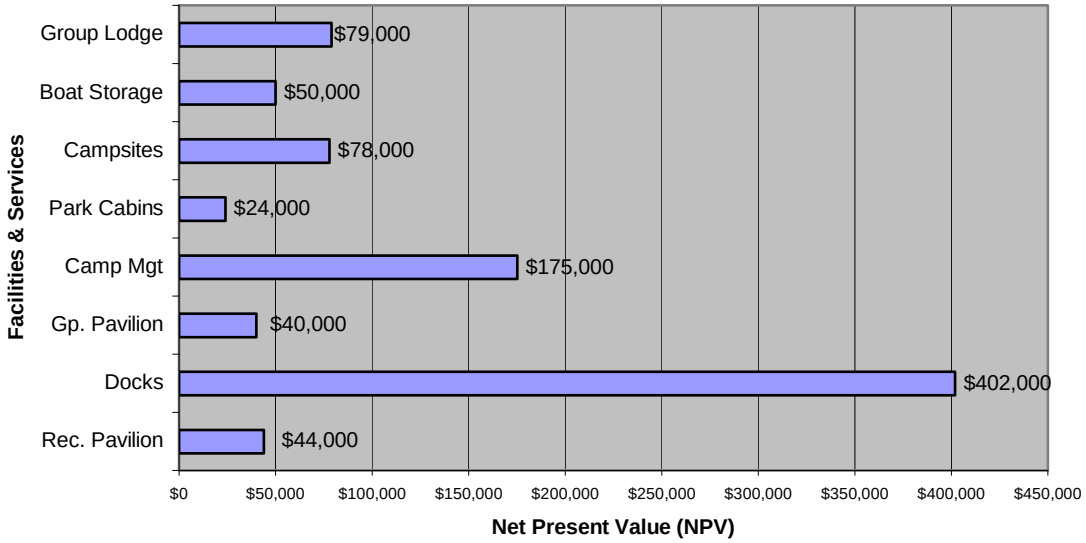


Figure 17. Net Present Value (NPV) for All Facilities & Services



Comparison Across Seven Alternatives

The seven Alternatives compared are**:**

1 Life Cycle Cost Analysis-Alternative 1 (All Facilities and Services)

Alternative 1 includes all facilities and services presented for analysis in this report. These facilities and services are:

Group Lodge
Enclosed Dry Boat Storage
Campsites
Park Model Mobile Camper Cabins
Management of Reclamation Campground
Group Pavilion
Docks
Reclamation Group Pavilion Add On and Management

2. Life Cycle Cost Analysis-Alternative 2 (Public Demand)

Alternative 2 includes those facilities and services identified and suggested by the public in the May 2008 Phase 1 Public Comment Summary and Analysis Report.

These facilities and services are:

Enclosed Dry Boat Storage
Campsites
Park Model Mobile Camper Cabins
Group Pavilion
Docks
Reclamation Group Pavilion Add On and Management

The Group Lodge and the Reclamation Campground Management were not identified and suggested by the public.

3 Life Cycle Cost Analysis-Alternative 3 (Rapid Pay-Back/ Highest ROI & IRR)

Alternative 3 includes those facilities and services with the highest return on investment, highest internal rate of return and the fewest number of years to pay back the investment. These facilities and services are:

Campground Management of Reclamation Campground
Docks
Reclamation Group Pavilion Add On and Management

4. Life Cycle Cost Analysis-Alternative 4 (Concession Management of Reclamation Facilities)

Alternative 4 includes only those facilities and services that can be managed as separate concession facilities from those on the Marina site. These facilities and improvements are built by Reclamation and would be operated by the Marina managers as separate concessions from those built by the Marina operators on the Marina site. The marina operator would pay Reclamation a separate concession fee for the use of these facilities. These facilities and services are:

Management of Reclamation Campground
Reclamation Group Pavilion Add On and Management

5. Life Cycle Cost Analysis – Alternative 5 (High Capital Intensive)

Alternative 5 includes those facilities and services that require a Capital Expenditure/Total Initial Collateral Cost above $80,000. These facilities and services are:

Group Lodge
Enclosed Dry Boat Storage
Campsites
Park Model Mobile Camper Cabins

6. Life Cycle Cost Analysis – Alternative 6 (Low Capital Intensive)

Alternative 6 includes those facilities and services that require a Capital Expenditure/Total Initial Collateral Cost below $70,000. These facilities and services are:

Management of Reclamation Campground
Group Pavilion
Dock
Reclamation Group Pavilion Add On and Management

7. Life Cycle Cost Analysis – Alternative 7 (Medium Capital Intensive/Concession Management of Reclamation Facilities)

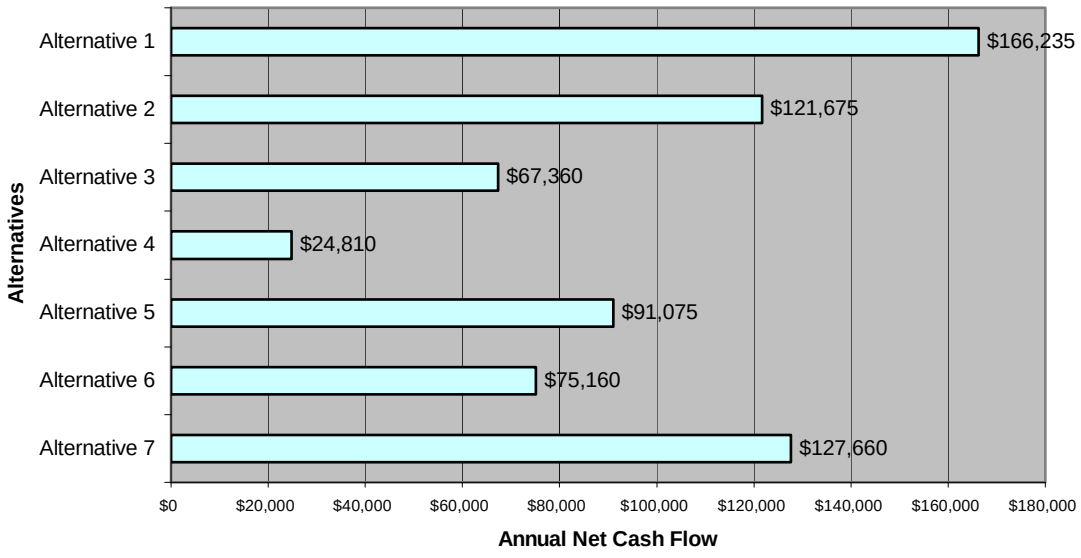
Alternative 7 is basically the same as Alternative 2 (Public Demand) with the following change. The Boat Storage is removed since a number of these facilities already exist around the Lake, and the Management of the Reclamation Campground replaces the Boat Storage because of the potential financial gain and benefits to Reclamation and the Marina operator. Also, the Add on to the Reclamation Group Pavilion would be done by Reclamation and Management by Kim's.

Management of Reclamation Campground
Campsites
Park Model Mobile Camper Cabins
Group Pavilion
Docks
Reclamation Group Pavilion Add On and Management

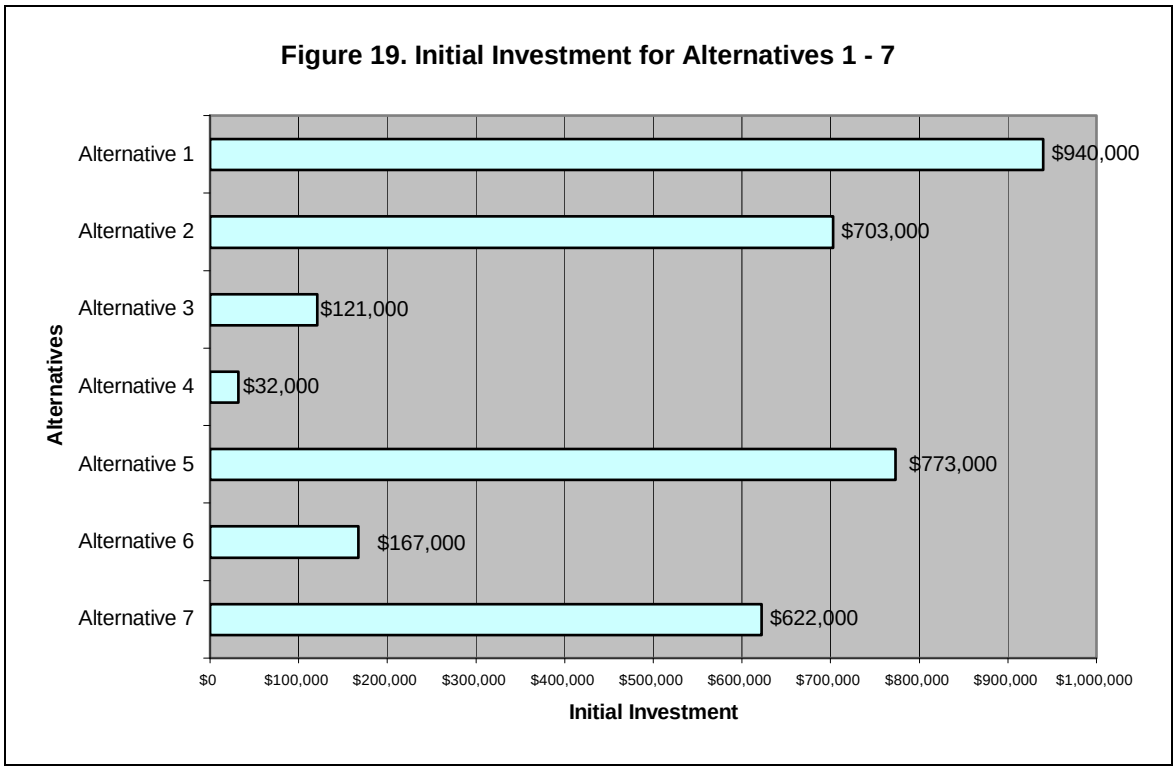
The following tables and bar graphs are presented to summarize the fully detailed Life Cycle Cost Analysis tables presented in Appendix A, and to help the reader visualize the financial differences between the seven alternatives

Table 2. Investment Analysis for Alternatives 1 - 7							
	Alt. 1 (All Facilities & Services)	Alt. 2 (Public Demand)	Alt. 3 (Highest ROI/IRR & Rapid Pay Back)	Alt. 4 (Management of Reclamation Facilities)	Alt. 5 (High Capital Intensive)	Alt. 6 (Low Capital Intensive)	Alt. 7 (Medium Capital Intensive/ concession Mgt.)
Annual Net Cash Flow	$166,235	$121,675	$67,360	$24,810	$91,075	$75,160	$127,660
Initial Investment	$940,000	$703,000	$121,000	$32,000	$773,000	$167,000	$622,000
Pay Back (years)	6	6	2	1	8	2	5
Return on Investment	17.68%	17.31%	55.67%	77.53%	11.78%	45.01%	20.52%
Internal Rate of Return	16.91%	16.49%	55.67%	77.53%	10.04%	45.01%	20.52%
Net Present Value	$892,000	$638,000	$621,000	$241,000	$231,000	$661,000	$785,000

Figure 18. Annual Net Cash Flow for Alternatives 1 - 7



Note: Alternative 1: All Facilities & Services; Alternative 2: Public Demand; Alternative 3: Highest ROI/IRR & Rapid Pay Back; Alternative 4: Management of Reclamation Facilities; Alternative 5: High Capital Intensive; Alternative 6: Low Capital Intensive; Alternative 7: Medium Capital Intensive/Concession Management.



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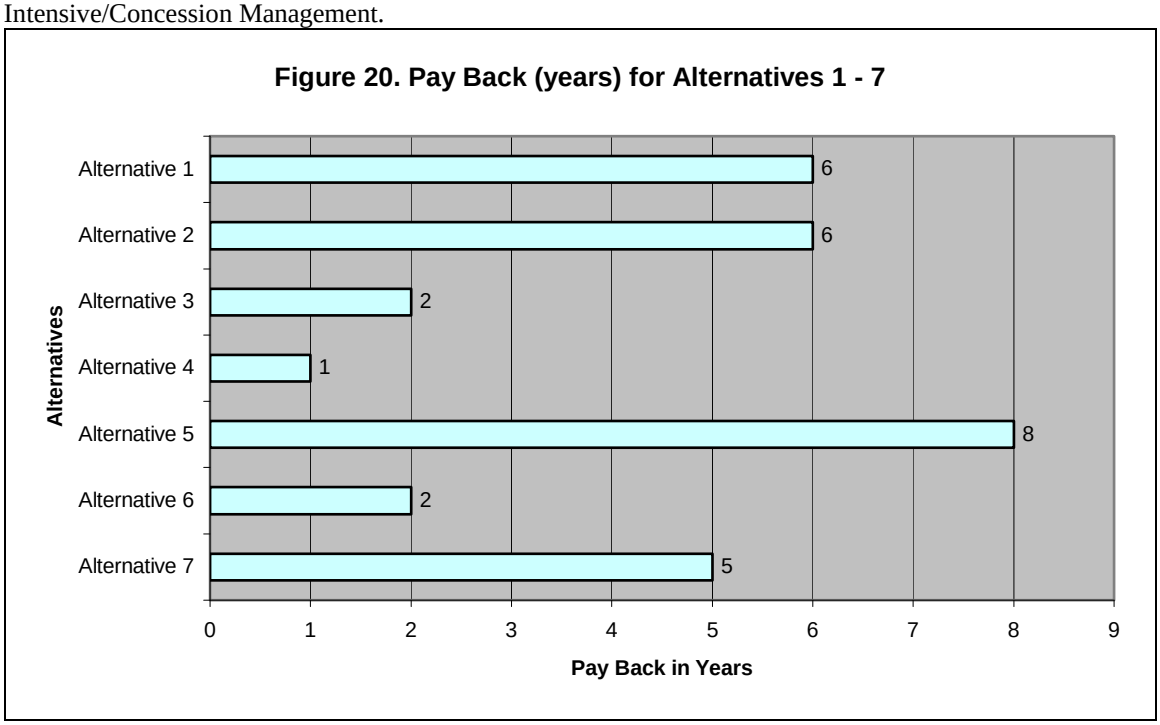
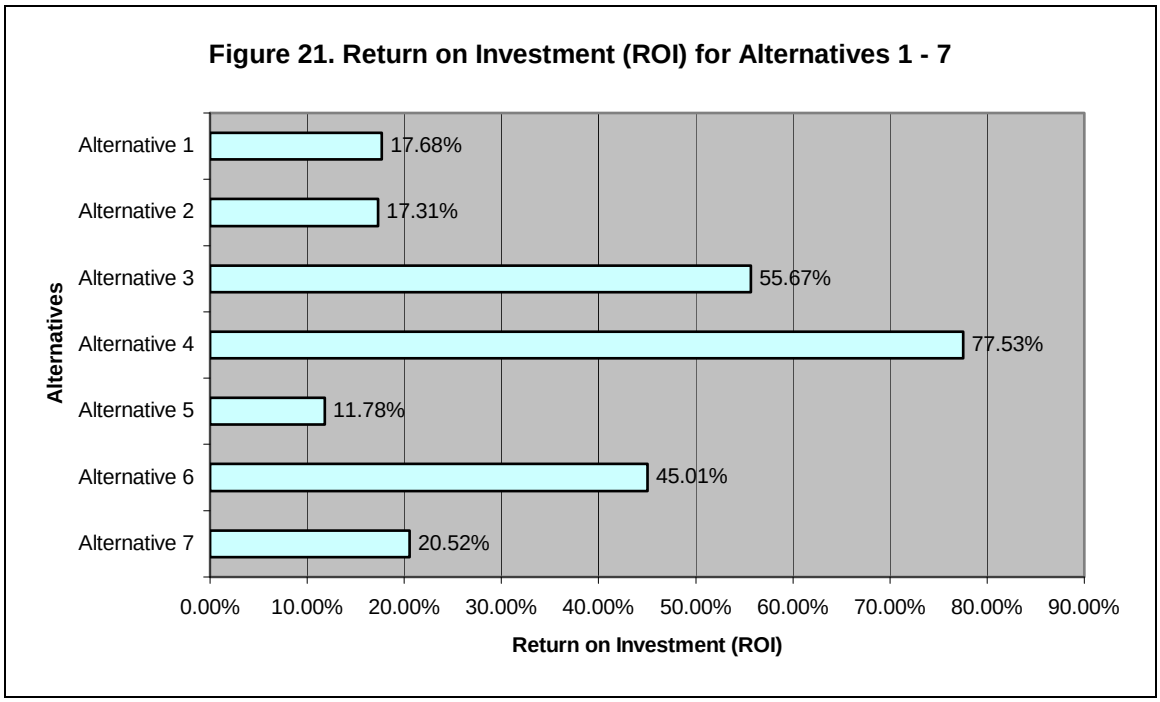


Note: Alternative 1: All Facilities & Services; Alternative 2: Public Demand; Alternative 3: Highest ROI/IRR & Rapid Pay Back; Alternative 4: Management of Reclamation Facilities; Alternative 5: High Capital Intensive; Alternative 6: Low Capital Intensive; Alternative 7: Medium Capital Intensive/Concession Management.



Note: Alternative 1: All Facilities & Services; Alternative 2: Public Demand; Alternative 3: Highest ROI/IRR & Rapid Pay Back; Alternative 4: Management of Reclamation Facilities; Alternative 5: High Capital Intensive; Alternative 6: Low Capital Intensive; Alternative 7: Medium Capital Intensive/Concession Management.

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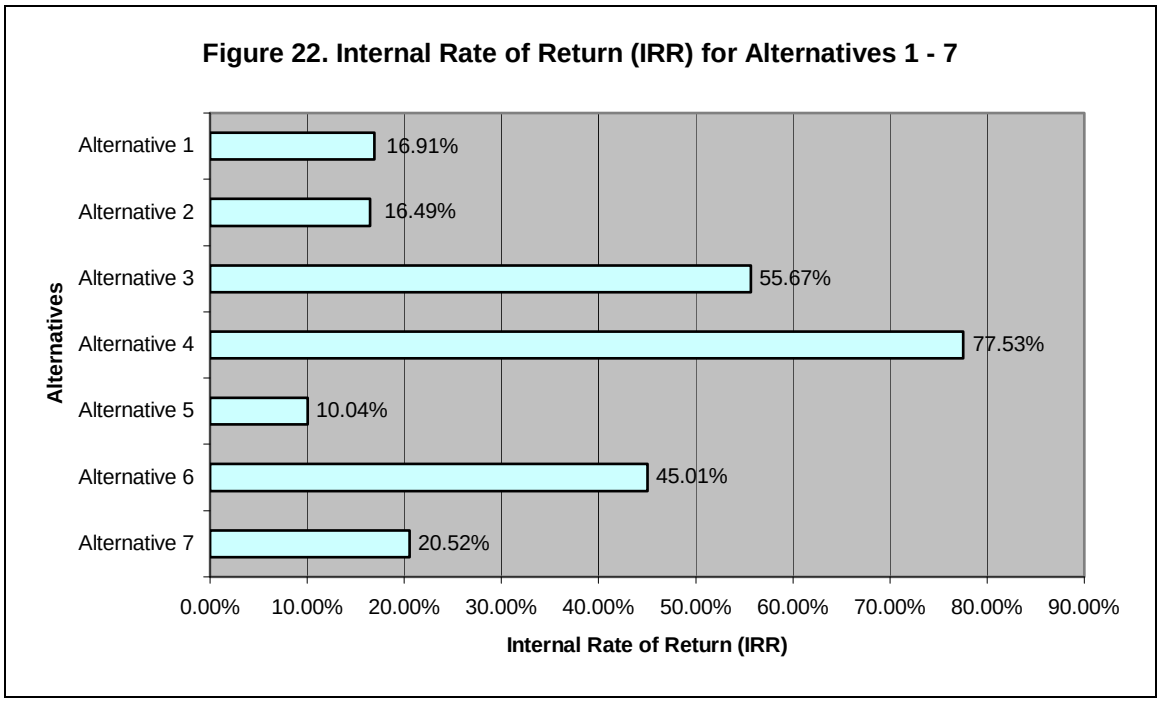

Note: Alternative 1: All Facilities & Services; Alternative 2: Public Demand; Alternative 3: Highest ROI/IRR & Rapid Pay Back; Alternative 4: Management of Reclamation Facilities; Alternative 5: High Capital Intensive; Alternative 6: Low Capital Intensive; Alternative 7: Medium Capital Intensive/Concession Management.

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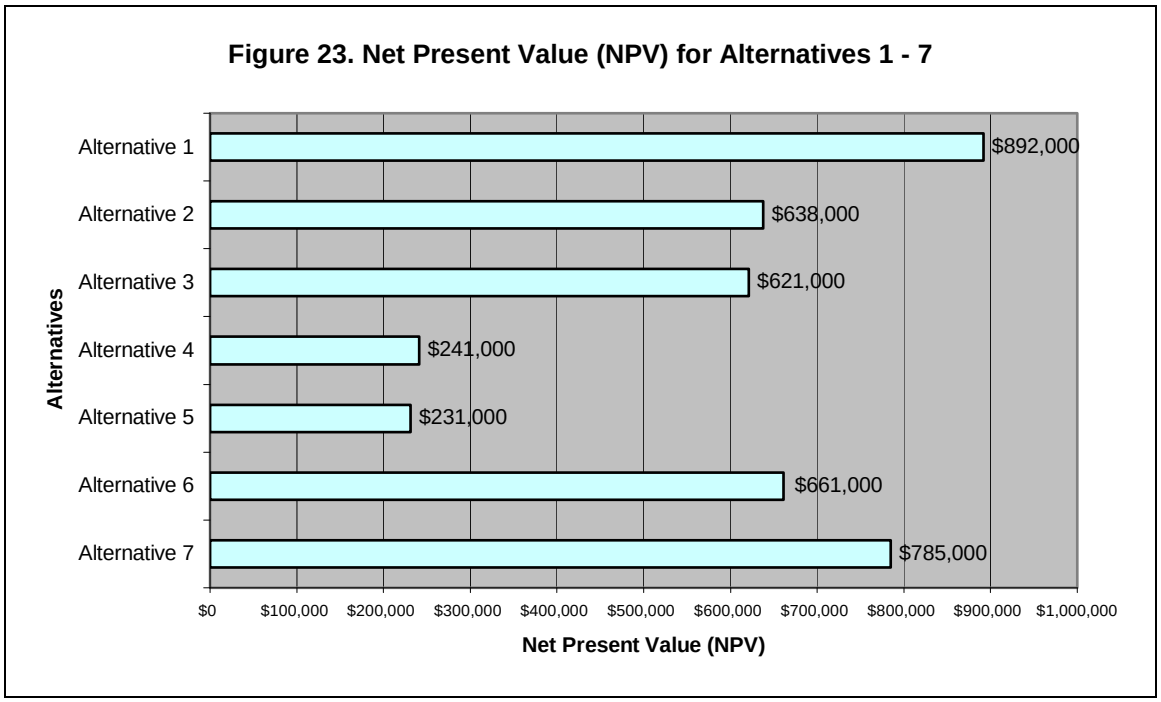

Note: Alternative 1: All Facilities & Services; Alternative 2: Public Demand; Alternative 3: Highest ROI/IRR & Rapid Pay Back; Alternative 4: Management of Reclamation Facilities; Alternative 5: High Capital Intensive; Alternative 6: Low Capital Intensive; Alternative 7: Medium Capital Intensive/Concession Management.

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X. Summary and Conclusions

Summary:

Following are some highlights that help summarize the information in this report.

1. All facilities and services analyzed are technically feasible.
2. All facilities and services are financially feasible.
3. All of the Alternatives except Alternative 4 (management of Reclamation Facilities) and the following individual facilities would replace the revenue lost from removal of trailers: campsites and docks.
4. All facilities and services have the potential to provide greater return on investment, ROI/IRR than can typically be experienced from average yearly returns from investments such as the stock, bond or commodity markets or bank savings such as money market and CD accounts.
5. Of all the facilities and services, the management of the Reclamation Campground followed by the Dock provide, by far, the greatest ROI, IRR and NPV, and the shortest years for payback.
6. Comparing just the facilities, the Dock has the second lowest Capital Investment cost yet provides the greatest ROI, IRR, and NPV; and has the shortest years for pay back.
7. Conversely, the Campsites followed by the Group Lodge and Park Cabins, compared to the other facilities and services, have the highest Capital Investment cost with the lowest ROI, IRR; and the longest years for payback.
8. Alternatives 3, 5, and 6 all have significant cash flows. However, Alternatives 3 and 6 require significantly lower (4 to five times lower) investment dollars for returns comparable to alternative 5.
9. Returns on Investments and Internal Rates of Returns are significantly higher for Alternatives 3, 4 and 6 than for 1, 2, 5 and 7.
10. The highest NPV comes from Alternative 1 followed closely by Alternatives 7, 2, and 6.

Conclusions:

The selection of an individual facility or service or an Alternative is dependant on the goals of Reclamation and the Marina operator. If the goal is:

1. to just replace the loss of around $29,000 of Total Incremental Revenue/Gross Revenue from the removal of the trailers, then all of the Alternatives except Alternative 4 (management of Reclamation facilities) work. The following individual facilities also work: Campsites and Dock.
2. to meet all of the public demand, then Alternative 2 works followed by Alternative 1 and 7: however, Alternative 1 requires high initial Capital Expenditures and alternative 7 requires medium initial Capital Expenditures.

3. to maximize Annual Net Cash flow, then Alternative 1 works best followed by Alternative 7 and 2.
4. to minimize Capital Expenditure, then Alternatives 4, 3 and 6 are good choices.
5. to provide the greatest returns on investments (ROI) and (IRR), then Alternatives 4, 3 and 6 work best.
6. to pay back the initial investment in the shortest period of time (years), then Alternatives 4, 3 and 6 are good choices.
7. to maximize NPV, Alternatives 1 and 7 are the best choices.
8. to utilize and manage Reclamation facilities as separate concessions, then, Alternative 4 is the best choice, but this Alternative does not meet public demand.
9. to meet public demand, generate higher marina store and service revenues, replace trailer revenue and provide significant annual net cash flow and Net Present Value, then Alternative 7 is a good choice. However return on investment, although good, is less than half of Alternatives 4, 3 and 6.

Ultimately, whatever Alternative or individual facility might be selected, the Marina operator, Reclamation and the public stand to benefit from expanded facilities and services, and additional Marina revenue and sustainability of operations.

***Disclaimer*: The dollar amounts and costs presented in this report are only estimates and not meant to be construed or used as exact or final costs for facilities and services. The facilities and services pictured and described are only examples of what might be. Size of facilities, nature and quality of materials selected for construction, government regulations and requirements, local vs. national or regional variations in costs and rapidly fluctuating costs of materials, labor, interest rates, transportation costs etc. will cause these estimates to vary. When and if facilities are constructed, additional up-to date cost analysis must be done before deciding to proceed with construction.**

Appendix A: Life Cycle Cost Analysis Tables

CANYON FERRY (Kim's Marina)

Life Cycle Cost Analysis for Alternative 1-(All Facilities & Services)

		INTEREST RATE	6.5%									
I.	**CAPITAL EXPENDITURES**	**ECONOMIC LIFE**	20	**BREAKDOWN BY FACILITY**								
	ITEM DESCRIPTION	UNIT PRICE	UNIT	Group Lodge	Boat Storage	Campsites	Park Cabins	Camp Mgt.	Gp Pavilion	Docks	Rec. Pavilion	TOTAL
1	Group Lodge	$150,000.00	EA	1								$ 150,000
2	Dry Boat Storage60x100 22 boats	$60,000.00	EA		1							60,000
3	Campsites (Urban) full service	$14,000.00	EA			14						196,000
4	Park Cabins	$18,000.00	EA				2					36,000
5	Camp&Pavilion Mgt-Cap.Equipment	$5,000.00	EA					4			1	25,000
6	Group Pavilion	$30,000.00	EA						1			30,000
7	Dock	$8,000.00	EA							1		8,000
8	Rec. Pavilion add-on&well	$16,000.00	EA								1	16,000
9	Water	$14.50	LF	100	100	500	300		200			17,400
10	Electric box Amp 50,30,20+Pedist.	$2,500.00	EA			15						37,500
11	Campsite (Urban ADA)	$17,000.00	EA			1						17,000
12	Park Cabin ADA	$21,000.00	EA				1					21,000
13	Jetty	$20.00	CU YD							2,000		40,000
14	PK Cabins Elec. level, pad, grate	$8,000.00	EA				3					24,000
		SUBTOTAL		$ 151,450	$ 61,450	$ 257,750	$ 85,350	$ 20,000	$ 32,900	$ 48,000	$ 21,000	$ 677,900
		Mobilization	5%	7,573	3,073	12,888	4,268	-	1,645	2,400	1,050	32,895
		Unlisted Items	10%	15,145	6,145	25,775	8,535	2,000	3,290	4,800	2,100	67,790
		CONTRACT COST		$ 174,168	$ 70,668	$ 296,413	$ 98,153	$ 22,000	$ 37,835	$ 55,200	$ 24,150	$ 778,585
		Contingencies	15%	26,125	10,600	44,462	14,723	3,300	5,675	8,280	3,623	116,788
		FIELD COST		$ 200,300	$ 81,300	$ 340,900	$ 112,900	$ 25,300	$ 43,500	$ 63,500	$ 27,800	$ 895,500
		Design	3%	6,009	-	10,227	-	-	1,305	1,905	834	20,280
		Construction Oversight	3%	6,009	2,439	10,227	3,387	-	1,305	1,905	834	26,106
		TOTAL INITIAL/ COLLATERAL COST		$ 212,000	$ 84,000	$ 361,000	$ 116,000	$ 25,000	$ 46,000	$ 67,000	$ 29,000	$ 940,000

II.	**OPERATING COSTS**		Group Lodge	Boat Storage	Campsites	Park Cabins	Camp Mgt	Gp. Pavilion	Docks	Rec. Pavilion	TOTAL
	Number of Facilities		1	1	15	3	49	1	1	1	
	Operating days per year		80	365	90	80	120	60	120	50	
	Estimated Seasonal Hours		240	360	200	40	300	60	30	50	
	Hourly Rate		$15.00	$15.00	$15.00	$15.00	$15.00	$15.00	$15.00	$15.00	
	Total Seasonal Wages		$ 3,600	$ 5,400	$ 3,000	$ 600	$ 4,500	$ 900	$ 450	$ 750	$ 19,200
	Benefits	7.5%	300	400	200	-	300	100	-	100	1,400
	Total Incremental Labor		$ 3,900	$ 5,800	$ 3,200	$ 600	$ 4,800	$ 1,000	$ 450	$ 850	$ 20,600
	Operating Supplies/Maintenance		500	500	1,250	300	4,000	300	100	500	7,450
	Utilities		900	600	1,000	600	3,700	600	-	600	8,000
	Concession Fee 10% Gross						4,000			1,000	5,000
	Other stipen, mileage, waste				1,000		3,500		-		4,500
	Overhead	15.0%	800	1,000	1,000	200	3,000	300	100	400	6,800
	Total Incremental Costs		$ 6,100	$ 7,900	$ 7,450	$ 1,700	$ 23,000	$ 2,200	$ 650	$ 3,350	$ 52,350

III.	**REVENUE**	Group Lodge	Boat Storage	Campsites	Park Cabins	Camp Mgt	Gp. Pavilion	Docks	Rec. Pavilion	TOTAL
	Number of Facilities	1	1	15	3	49	1	1	1	
	Days used per year	65	365	90	80	70	50	90	50	
	Fee per use	$500.00	$2.50	$35.00	$60.00	$12.00	$200.00	$8.00	$200.00	
	Number of Fees per facility per day	1	22	1	1	1	1	60	1	
	Total Incremental Revenue	$ 32,500	$ 20,075	$ 47,250	$ 14,400	$ 41,160	$ 10,000	$ 43,200	$ 10,000	$ 218,585

IV.	**INVESTMENT ANALYSIS**	Group Lodge	Boat Storage	Campsites	Park Cabins	Camp Mgt	Gp. Pavilion	Docks	Rec. Pavilion	TOTAL
	Net Cash Flow	$ 26,400	$ 12,175	$ 39,800	$ 12,700	$ 18,160	$ 7,800	$ 42,550	$ 6,650	$ 166,235
	Initial Investment	212,000	84,000	361,000	116,000	25,000	46,000	67,000	29,000	940,000
	Pay Back (years)	8	7	9	9	1	6	2	4	6
	Return on Investment (ROI)	12.45%	14.49%	11.02%	10.95%	72.64%	16.96%	63.51%	22.93%	17.68%
	Internal Rate of Return (IRR)	10.87%	13.30%	9.09%	8.99%	72.64%	16.10%	63.51%	22.93%	16.91%
	Net Present Value (NPV)	$ 79,000	$ 50,000	$ 78,000	$ 24,000	$ 175,000	$ 40,000	$ 402,000	$ 44,000	$ 892,000

V.	**BREAK-EVEN ANALYSIS**	Group Lodge	Boat Storage	Campsites	Park Cabins	Camp Mgt	Gp. Pavilion	Docks	Rec. Pavilion	TOTAL
	Break-Even Revenue	$ 25,340	$ 15,524	$ 40,213	$ 12,228	$ 25,269	$ 6,375	$ 6,731	$ 5,982	$ 137,661
	Break-Even Days used per year per facility	51	282	77	68	43	32	14	30	
	Break-Even Fee	$389.85	$1.93	$29.79	$50.95	$7.37	$127.50	$1.25	$119.64	
	Break-Even Daily Usage	0.8	17.0	0.9	0.8	0.6	0.6	9.3	0.6	

CANYON FERRY (Kim's Marina)

Life Cycle Cost Analysis for Alternative 2-(Public Demand)

		INTEREST RATE	6.5%									
I.	CAPITAL EXPENDITURES	ECONOMIC LIFE	20	BREAKDOWN BY FACILITY								
	ITEM DESCRIPTION	UNIT PRICE	UNIT	Group Lodge	Boat Storage	Campsites	Park Cabins	Camp Mgt.	Gp. Pavilion	Docks	Rec. Pavilion	TOTAL
1	Group Lodge											
2	Dry Boat Storage60x100 22 boats	$60,000.00	EA		1							60,000
3	Campsites (Urban) full service	$14,000.00	EA			14						196,000
4	Park Cabins	$18,000.00	EA				2					36,000
5	Camp&Pavilion Mgt Cap.Equipment	$5,000.00									1	5,000
6	Group Pavilion	$30,000.00	EA						1			30,000
7	Dock	$8,000.00	EA							1		8,000
8	Rec.Pavilion add-on&well	$16,000.00	EA								1	16,000
9	Water	$14.50	LF		100	500	300		200			15,950
10	Electric box Amp 50,30,20+Pedist.	$2,500.00	EA			15						37,500
11	Campsite (Urban ADA)	$17,000.00	EA			1						17,000
12	Park Cabin ADA	$21,000.00	EA				1					21,000
13	Jetty	$20.00	CU YD							2,000		40,000
14	PK Cabins Elec. level, pad, grate	$8,000.00	EA				3					24,000
												-
		SUBTOTAL			$ 61,450	$ 257,750	$ 85,350		$ 32,900	$ 48,000	$ 21,000	$ 506,450
		Mobilization	5%		3,073	12,888	4,268		1,645	2,400	1,050	25,323
		Unlisted Items	10%		6,145	25,775	8,535		3,290	4,800	2,100	50,645
		CONTRACT COST			$ 70,668	$ 296,413	$ 98,153		$ 37,835	$ 55,200	$ 24,150	$ 582,418
		Contingencies	15%		10,600	44,462	14,723		5,675	8,280	3,623	87,363
		FIELD COST			$ 81,300	$ 340,900	$ 112,900		$ 43,500	$ 63,500	$ 27,800	$ 669,900
		Design	3%		-	10,227	-		1,305	1,905	834	14,271
		Construction Oversight	3%		2,439	10,227	3,387		1,305	1,905	834	20,097
		TOTAL INITIAL/ COLLATERAL COST			$ 84,000	$ 361,000	$ 116,000		$ 46,000	$ 67,000	$ 29,000	$ 703,000

II.	OPERATING COSTS				Boat Storage	Campsites	Park Cabins		Gp. Pavilion	Docks	Rec. Pavilion	TOTAL
	Number of Facilities				1	15	3		1	1	1	
	Operating days per year				365	90	80		60	120	50	
	Estimated Seasonal Hours				360	200	40		60	30	50	
	Hourly Rate				$15.00	$15.00	$15.00		$15.00	$15.00	$15.00	
	Total Seasonal Wages				$ 5,400	$ 3,000	$ 600		$ 900	$ 450	$ 750	$ 11,100
	Benefits		7.5%		400	200	-		100	-	100	800
	Total Incremental Labor				$ 5,800	$ 3,200	$ 600		$ 1,000	$ 450	$ 850	$ 11,900
	Operating Supplies/Maintenance				500	1,250	300		300	100	500	2,950
	Utilities				600	1,000	600		600	-	600	3,400
	Concession Fee10% of Gross										1,000	1,000
	Other stipen, mileage, waste					1,000				-		1,000
	Overhead		15.0%		1,000	1,000	200		300	100	400	3,000
	Total Incremental Costs				$ 7,900	$ 7,450	$ 1,700		$ 2,200	$ 650	$ 3,350	$ 23,250

III.	REVENUE				Boat Storage	Campsites	Park Cabins		Gp. Pavilion	Docks	Rec. Pavilion	TOTAL
	Number of Facilities				1	15	3		1	1	1	
	Days used per year				365	90	80		50	90	50	
	Fee per use				$2.50	$35.00	$60.00		$200.00	$8.00	$200.00	
	Number of Fees per facility per day				22	1	1		1	60	1	
	Total Incremental Revenue				$ 20,075	$ 47,250	$ 14,400		$ 10,000	$ 43,200	$ 10,000	$ 144,925

IV.	INVESTMENT ANALYSIS				Boat Storage	Campsites	Park Cabins		Gp. Pavilion	Docks	Rec. Pavilion	TOTAL
	Net Cash Flow				$ 12,175	$ 39,800	$ 12,700		$ 7,800	$ 42,550	$ 6,650	$ 121,675
	Initial Investment				84,000	361,000	116,000		46,000	67,000	29,000	703,000
	Pay Back (years)				7	9	9		6	2	4	6
	Return on Investment (ROI)				14.49%	11.02%	10.95%		16.96%	63.51%	22.93%	17.31%
	Internal Rate of Return (IRR)				13.30%	9.09%	8.99%		16.10%	63.51%	22.93%	16.49%
	Net Present Value (NPV)				$ 50,000	$ 78,000	$ 24,000		$ 40,000	$ 402,000	$ 44,000	$ 638,000

V.	BREAK-EVEN ANALYSIS				Boat Storage	Campsites	Park Cabins		Gp. Pavilion	Docks	Rec. Pavilion	TOTAL
	Break-Even Revenue				$ 15,524	$ 40,213	$ 12,228		$ 6,375	$ 6,731	$ 5,982	$ 87,052
	Break-Even Days used per year per facility				282	77	68		32	14	30	
	Break-Even Fee				$1.93	$29.79	$50.95		$127.50	$1.25	$119.64	
	Break-Even Daily Usage				17.0	0.9	0.8		0.6	9.3	0.6	

CANYON FERRY (Kim's Marina)

Life Cycle Cost Analysis for Alternative 3-(Highest ROI/IRR &Rapid Pay-Back)

		INTEREST RATE	6.5%						
I.	**CAPITAL EXPENDITURES**	**ECONOMIC LIFE**	20	**BREAKDOWN BY FACILITY**					
	ITEM DESCRIPTION	UNIT PRICE	UNIT		Camp Mgt.		Docks	Rec. Pavilion	TOTAL
1	Group Lodge	$150,000.00	EA						$ -
2	Dry Boat Storage60x100 22 boats	$60,000.00	EA						-
3	Campsites (Urban) full service	$14,000.00	EA						-
4	Park Cabins	$18,000.00	EA						-
5	Camp&Pavilion Mgt-Cap Equipment	$5,000.00	EA		4			1	25,000
6	Group Pavilion	$30,000.00	EA						-
7	Dock	$8,000.00	EA				1		8,000
8	Rec. Pavilion add-on & well	$16,000.00	EA					1	16,000
9	Water	$14.50	LF						-
10	Electric box Amp 50,30,20+Pedist.	$2,500.00	EA						-
11	Campsite (Urban ADA)	$17,000.00	EA						-
12	Park Cabin ADA	$21,000.00	EA						-
13	Jetty	$20.00	CU YD				2,000		40,000
14	PK Cabins Elec. level, pad, grate	$8,000.00	EA						-
									-
		SUBTOTAL			$ 20,000		$ 48,000	$ 21,000	$ 89,000
		Mobilization	5%		-		2,400	1,050	3,450
		Unlisted Items	10%		2,000		4,800	2,100	8,900
		CONTRACT COST			$ 22,000		$ 55,200	$ 24,150	$ 101,350
		Contingencies	15%		3,300		8,280	3,623	15,203
		FIELD COST			$ 25,300		$ 63,500	$ 27,800	$ 116,600
		Design	3%		-		1,905	834	2,739
		Construction Oversight	3%		-		1,905	834	2,739
	TOTAL INITIAL/ COLLATERAL COST				$ 25,000		$ 67,000	$ 29,000	$ 121,000
II.	**OPERATING COSTS**				Camp Mgt		Docks	Rec. Pavilion	TOTAL
	Number of Facilities				49		1	1	
	Operating days per year				120		120	50	
	Estimated Seasonal Hours				300		30	50	
	Hourly Rate				$15.00		$15.00	$15.00	
	Total Seasonal Wages				$ 4,500		$ 450	$ 750	$ 5,700
	Benefits		7.5%		300		-	100	400
	Total Incremental Labor				$ 4,800		$ 450	$ 850	$ 6,100
	Operating Supplies/Maintenance				4,000		100	500	4,600
	Utilities				3,700		-	600	4,300
	Concession fee10% of Gross				4,000			1,000	5,000
	Other stipen, mileage, waste				3,500		-		3,500
	Overhead		15.0%		3,000		100	400	3,500
	Total Incremental Costs				$ 23,000		$ 650	$ 3,350	$ 27,000
III.	**REVENUE**				Camp Mgt		Docks	Rec. Pavilion	TOTAL
	Number of Facilities				49		1	1	
	Days used per year				70		90	50	
	Fee per use				$12.00		$8.00	$200.00	
	Number of Fees per facility per day				1		60	1	
	Total Incremental Revenue				$ 41,160		$ 43,200	$ 10,000	$ 94,360
IV.	**INVESTMENT ANALYSIS**				Camp Mgt		Docks	Rec. Pavilion	TOTAL
	Net Cash Flow				$ 18,160		$ 42,550	$ 6,650	$ 67,360
	Initial Investment				25,000		67,000	29,000	121,000
	Pay Back (years)				1		2	4	2
	Return on Investment (ROI)				72.64%		63.51%	22.93%	55.67%
	Internal Rate of Return (IRR)				72.64%		63.51%	22.93%	55.67%
	Net Present Value (NPV)				$ 175,000		$ 402,000	$ 44,000	$ 621,000
V.	**BREAK-EVEN ANALYSIS**				Camp Mgt		Docks	Rec. Pavilion	TOTAL
	Break-Even Revenue				$ 25,269		$ 6,731	$ 5,982	$ 37,982
	Break-Even Days used per year per facility				43		14	30	
	Break-Even Fee				$7.37		$1.25	$119.64	
	Break-Even Daily Usage				0.6		9.3	0.6	

CANYON FERRY (Kim's Marina)

Life Cycle Cost Analysis for Alternative 4-(Management of Reclamation Facilities)

		INTEREST RATE	6.5%			
I.	**CAPITAL EXPENDITURES**	**ECONOMIC LIFE**	20	**BREAKDOWN BY FACILITY**		
	ITEM DESCRIPTION	UNIT PRICE	UNIT	Camp Mgt.	Rec. Pavilion	TOTAL
1	Group Lodge	$150,000.00	EA			$ -
2	Dry Boat Storage60x100 22 boats	$60,000.00	EA			-
3	Campsites (Urban) full service	$14,000.00	EA			-
4	Park Cabins	$18,000.00	EA			-
5	Camp Mgt. Cap Equipment	$5,000.00	EA	4	1	25,000
6	Group Pavilion	$30,000.00	EA			-
7	Dock	$8,000.00	EA			-
8	Reclamation Pavilion add-on/well	$10,000.00	EA			-
9	Water and/or electric 110	$14.50	LF			-
10	Electric box Amp 50,30,20+Pedist.	$2,500.00	EA			-
11	Campsite (Urban ADA)	$17,000.00	EA			-
12	Park Cabin ADA	$21,000.00	EA			-
13	Jetty	$20.00	CU YD			-
14	PK Cabins Elec. level, pad, grate	$8,000.00	EA			-
						-
		SUBTOTAL		$ 20,000	$ 5,000	$ 25,000
		Mobilization	5%	-	250	250
		Unlisted Items	10%	2,000	500	2,500
		CONTRACT COST		$ 22,000	$ 5,750	$ 27,750
		Contingencies	15%	3,300	863	4,163
		FIELD COST		$ 25,300	$ 6,600	$ 31,900
		Design	3%	-	198	198
		Construction Oversight	3%	-	198	198
	TOTAL INITIAL/ COLLATERAL COST			$ 25,000	$ 7,000	$ 32,000
II.	**OPERATING COSTS**			Camp Mgt	Rec. Pavilion	TOTAL
	Number of Facilities			49	1	
	Operating days per year			120	50	
	Estimated Seasonal Hours			300	50	
	Hourly Rate			$15.00	$15.00	
	Total Seasonal Wages			$ 4,500	$ 750	$ 5,250
	Benefits		7.5%	300	100	400
	Total Incremental Labor			$ 4,800	$ 850	$ 5,650
	Operating Supplies/Maintenance			4,000	500	4,500
	Utilities			3,700	600	4,300
	Concession Fee 10%of Gross			4,000	1,000	5,000
	Other stipen, mileage, waste			3,500		3,500
	Overhead		15.0%	3,000	400	3,400
	Total Incremental Costs			$ 23,000	$ 3,350	$ 26,350
III.	**REVENUE**			Camp Mgt	Rec. Pavilion	TOTAL
	Number of Facilities			49	1	
	Days used per year			70	50	
	Fee per use			$12.00	$200.00	
	Number of Fees per facility per day			1	1	
	Total Incremental Revenue			$ 41,160	$ 10,000	$ 51,160
IV.	**INVESTMENT ANALYSIS**			Camp Mgt	Rec. Pavilion	TOTAL
	Net Cash Flow			$ 18,160	$ 6,650	$ 24,810
	Initial Investment			25,000	7,000	32,000
	Pay Back (years)			1	1	1
	Return on Investment (ROI)			72.64%	95.00%	77.53%
	Internal Rate of Return (IRR)			72.64%	95.00%	77.53%
	Net Present Value (NPV)			$ 175,000	$ 66,000	$ 241,000
V.	**BREAK-EVEN ANALYSIS**			Camp Mgt	Rec. Pavilion	TOTAL
	Break-Even Revenue			$ 25,269	$ 3,985	$ 29,254
	Break-Even Days used per year per facility			43	20	
	Break-Even Fee			$7.37	$79.71	
	Break-Even Daily Usage			0.6	0.4	

CANYON FERRY (Kim's Marina)

Life Cycle Cost Analysis for Alternative 5-(High Capital Intensive)

		INTEREST RATE	6.5%									
I.	**CAPITAL EXPENDITURES**	**ECONOMIC LIFE**	20	**BREAKDOWN BY FACILITY**								
	ITEM DESCRIPTION	UNIT PRICE	UNIT	Group Lodge	Boat Storage	Campsites	Park Cabins	Camp Mgt.	Gp Pavilion	Docks	Rec. Pavilion	TOTAL
1	Group Lodge	$150,000.00	EA	1								$ 150,000
2	Dry Boat Storage60x100 22 boats	$60,000.00	EA		1							60,000
3	Campsites (Urban) full service	$14,000.00	EA			14						196,000
4	Park Cabins	$18,000.00	EA				2					36,000
5	Camp&pavilion Mgt Cap.Equipment	$5,000.00	EA									-
6	Group Pavilion	$30,000.00	EA									-
7	Dock	$8,000.00	EA									-
8	Reclamation Pavilion add-on	$10,000.00	EA									-
9	Water and/or electric 110	$14.50	LF	100	100	500	300					14,500
10	Electric box Amp 50,30,20+Pedist.	$2,500.00	EA			15						37,500
11	Campsite (Urban ADA)	$17,000.00	EA			1						17,000
12	Park Cabin ADA	$21,000.00	EA				1					21,000
13	Jetty	$20.00	CU YD									-
14	PK Cabins Elec. level, pad, grate	$8,000.00	EA				3					24,000
												-
		SUBTOTAL		$ 151,450	$ 61,450	$ 257,750	$ 85,350					$ 556,000
		Mobilization	5%	7,573	3,073	12,888	4,268					27,800
		Unlisted Items	10%	15,145	6,145	25,775	8,535					55,600
		CONTRACT COST		$ 174,168	$ 70,668	$ 296,413	$ 98,153					$ 639,400
		Contingencies	15%	26,125	10,600	44,462	14,723					95,910
		FIELD COST		$ 200,300	$ 81,300	$ 340,900	$ 112,900					$ 735,400
		Design	3%	6,009	-	10,227	-					16,236
		Construction Oversight	3%	6,009	2,439	10,227	3,387					22,062
		TOTAL INITIAL/ COLLATERAL COST		$ 212,000	$ 84,000	$ 361,000	$ 116,000					$ 773,000

II.	**OPERATING COSTS**		Group Lodge	Boat Storage	Campsites	Park Cabins					TOTAL
	Number of Facilities		1	1	15	3					
	Operating days per year		80	365	90	80					
	Estimated Seasonal Hours		240	360	200	40					
	Hourly Rate		$15.00	$15.00	$15.00	$15.00					
	Total Seasonal Wages		$ 3,600	$ 5,400	$ 3,000	$ 600					$ 12,600
	Benefits	7.5%	300	400	200	-					900
	Total Incremental Labor		$ 3,900	$ 5,800	$ 3,200	$ 600					$ 13,500
	Operating Supplies/Maintenance		500	500	1,250	300					2,550
	Utilities		900	600	1,000	600					3,100
	Concession Fee 10% Gross										-
	Other stipen, mileage, waste				1,000						1,000
	Overhead	15.0%	800	1,000	1,000	200					3,000
	Total Incremental Costs		$ 6,100	$ 7,900	$ 7,450	$ 1,700					$ 23,150

III.	**REVENUE**	Group Lodge	Boat Storage	Campsites	Park Cabins					TOTAL
	Number of Facilities	1	1	15	3					
	Days used per year	65	365	90	80					
	Fee per use	$500.00	$2.50	$35.00	$60.00					
	Number of Fees per facility per day	1	22	1	1					
	Total Incremental Revenue	$ 32,500	$ 20,075	$ 47,250	$ 14,400					$ 114,225

IV.	**INVESTMENT ANALYSIS**	Group Lodge	Boat Storage	Campsites	Park Cabins					TOTAL
	Net Cash Flow	$ 26,400	$ 12,175	$ 39,800	$ 12,700					$ 91,075
	Initial Investment	212,000	84,000	361,000	116,000					773,000
	Pay Back (years)	8	7	9	9					8
	Return on Investment (ROI)	12.45%	14.49%	11.02%	10.95%					11.78%
	Internal Rate of Return (IRR)	10.87%	13.30%	9.09%	8.99%					10.04%
	Net Present Value (NPV)	$ 79,000	$ 50,000	$ 78,000	$ 24,000					$ 231,000

V.	**BREAK-EVEN ANALYSIS**	Group Lodge	Boat Storage	Campsites	Park Cabins					TOTAL
	Break-Even Revenue	$ 25,340	$ 15,524	$ 40,213	$ 12,228					$ 93,305
	Break-Even Days used per year per facility	51	282	77	68					
	Break-Even Fee	$389.85	$1.93	$29.79	$50.95					
	Break-Even Daily Usage	0.8	17.0	0.9	0.8					

CANYON FERRY (Kim's Marina)

Life Cycle Cost Analysis for Alternative 6-(Low Capital Intensive)

		INTEREST RATE	6.5%									
I.	**CAPITAL EXPENDITURES**	**ECONOMIC LIFE**	20	**BREAKDOWN BY FACILITY**								
	ITEM DESCRIPTION	UNIT PRICE	UNIT	Group Lodge	Boat Storage	Campsites	Park Cabins	Camp Mgt.	Gp. Pavilion	Docks	Rec. Pavilion	TOTAL
1	Group Lodge	$150,000.00	EA									$ -
2	Dry Boat Storage60x100 22 boats	$60,000.00	EA									-
3	Campsites (Urban) full service	$14,000.00	EA									-
4	Park Cabins	$18,000.00	EA									-
5	Camp & Pavilion MgtCap Equipment	$5,000.00	EA					4			1	25,000
6	Group Pavilion	$30,000.00	EA						1			30,000
7	Dock	$8,000.00	EA							1		8,000
8	Rec. Pavilion add-on & well	$16,000.00	EA								1	16,000
9	Water	$14.50	LF						200			2,900
10	Electric box Amp 50,30,20+Pedist.	$2,500.00	EA									-
11	Campsite (Urban ADA)	$17,000.00	EA									-
12	Park Cabin ADA	$21,000.00	EA									-
13	Jetty	$20.00	CU YD							2,000		40,000
14	PK Cabins Elec. level, pad, grate	$8,000.00	EA									-
												-
		SUBTOTAL						$ 20,000	$ 32,900	$ 48,000	$ 21,000	$ 121,900
		Mobilization	5%					-	1,645	2,400	1,050	5,095
		Unlisted Items	10%					2,000	3,290	4,800	2,100	12,190
		CONTRACT COST						$ 22,000	$ 37,835	$ 55,200	$ 24,150	$ 139,185
		Contingencies	15%					3,300	5,675	8,280	3,623	20,878
		FIELD COST						$ 25,300	$ 43,500	$ 63,500	$ 27,800	$ 160,100
		Design	3%					-	1,305	1,905	834	4,044
		Construction Oversight	3%					-	1,305	1,905	834	4,044
		TOTAL INITIAL/ COLLATERAL COST						$ 25,000	$ 46,000	$ 67,000	$ 29,000	$ 167,000

II.	**OPERATING COSTS**							Camp Mgt	Gp. Pavilion	Docks	Rec. Pavilion	TOTAL
	Number of Facilities							49	1	1	1	
	Operating days per year							120	60	120	50	
	Estimated Seasonal Hours							300	60	30	50	
	Hourly Rate							$15.00	$15.00	$15.00	$15.00	
	Total Seasonal Wages							$ 4,500	$ 900	$ 450	$ 750	$ 6,600
	Benefits		7.5%					300	100	-	100	500
	Total Incremental Labor							$ 4,800	$ 1,000	$ 450	$ 850	$ 7,100
	Operating Supplies/Maintenance							4,000	300	100	500	4,900
	Utilities							3,700	600	-	600	4,900
	Concession Fee 10% Gross							4,000			1,000	5,000
	Other stipen, mileage, waste							3,500		-		3,500
	Overhead		15.0%					3,000	300	100	400	3,800
	Total Incremental Costs							$ 23,000	$ 2,200	$ 650	$ 3,350	$ 29,200

III.	**REVENUE**							Camp Mgt	Gp. Pavilion	Docks	Rec. Pavilion	TOTAL
	Number of Facilities							49	1	1	1	
	Days used per year							70	50	90	50	
	Fee per use							$12.00	$200.00	$8.00	$200.00	
	Number of Fees per facility per day							1	1	60	1	
	Total Incremental Revenue							$ 41,160	$ 10,000	$ 43,200	$ 10,000	$ 104,360

IV.	**INVESTMENT ANALYSIS**							Camp Mgt	Gp. Pavilion	Docks	Rec. Pavilion	TOTAL
	Net Cash Flow							$ 18,160	$ 7,800	$ 42,550	$ 6,650	$ 75,160
	Initial Investment							25,000	46,000	67,000	29,000	167,000
	Pay Back (years)							1	6	2	4	2
	Return on Investment (ROI)							72.64%	16.96%	63.51%	22.93%	45.01%
	Internal Rate of Return (IRR)							72.64%	16.10%	63.51%	22.93%	45.01%
	Net Present Value (NPV)							$ 175,000	$ 40,000	$ 402,000	$ 44,000	$ 661,000

V.	**BREAK-EVEN ANALYSIS**							Camp Mgt	Gp. Pavilion	Docks	Rec. Pavilion	TOTAL
	Break-Even Revenue							$ 25,269	$ 6,375	$ 6,731	$ 5,982	$ 44,356
	Break-Even Days used per year per facility							43	32	14	30	
	Break-Even Fee							$7.37	$127.50	$1.25	$119.64	
	Break-Even Daily Usage							0.6	0.6	9.3	0.6	

CANYON FERRY (Kim's Marina)

Life Cycle Cost Analysis for Alternative 7 (Medium Capital & Concession Management of Reclamation Facilities)

		INTEREST RATE	6.5%										
I.	**CAPITAL EXPENDITURES**	**ECONOMIC LIFE**	20			**BREAKDOWN BY FACILITY**							
	ITEM DESCRIPTION	UNIT PRICE	UNIT	Group Lodge	Boat Storage	Campsites	Park Cabins	Camp Mgt.	Gp. Pavilion	Docks	Rec. Pavilion	TOTAL	
1	Group Lodge	$150,000.00	EA									$ -	
2	Dry Boat Storage60x100 22 boats	$60,000.00	EA									-	
3	Campsites (Urban) full service	$14,000.00	EA			14						196,000	
4	Park Cabins	$18,000.00	EA				2					36,000	
5	Camp&Pavilion Mgt-Cap.Equipment	$5,000.00	EA					4			1	25,000	
6	Group Pavilion	$30,000.00	EA						1			30,000	
7	Dock	$8,000.00	EA							1		8,000	
8	Rec. Pavilion add-on&well	$16,000.00	EA									-	
9	Water	$14.50	LF			500	300		200			14,500	
10	Electric box Amp 50,30,20+Pedist.	$2,500.00	EA			15						37,500	
11	Campsite (Urban ADA)	$17,000.00	EA			1						17,000	
12	Park Cabin ADA	$21,000.00	EA				1					21,000	
13	Jetty	$20.00	CU YD							2,000		40,000	
14	PK Cabins Elec. level, pad, grate	$8,000.00	EA				3					24,000	
		SUBTOTAL				$ 257,750	$ 85,350	$ 20,000	$ 32,900	$ 48,000	$ 5,000	$ 449,000	
		Mobilization	5%			12,888	4,268	-	1,645	2,400	250	21,450	
		Unlisted Items	10%			25,775	8,535	2,000	3,290	4,800	500	44,900	
		CONTRACT COST				$ 296,413	$ 98,153	$ 22,000	$ 37,835	$ 55,200	$ 5,750	$ 515,350	
		Contingencies	15%			44,462	14,723	3,300	5,675	8,280	863	77,303	
		FIELD COST				$ 340,900	$ 112,900	$ 25,300	$ 43,500	$ 63,500	$ 6,600	$ 592,700	
		Design	3%			10,227	-	-	1,305	1,905	198	13,635	
		Construction Oversight	3%			10,227	3,387	-	1,305	1,905	198	17,022	
		TOTAL INITIAL/ COLLATERAL COST				$ 361,000	$ 116,000	$ 25,000	$ 46,000	$ 67,000	$ 7,000	$ 622,000	
II.	**OPERATING COSTS**					Campsites	Park Cabins	Camp Mgt	Gp. Pavilion	Docks	Rec. Pavilion	TOTAL	
	Number of Facilities					15	3	49	1	1	1		
	Operating days per year					90	80	120	60	120	50		
	Estimated Seasonal Hours					200	40	300	60	30	50		
	Hourly Rate					$15.00	$15.00	$15.00	$15.00	$15.00	$15.00		
	Total Seasonal Wages					$ 3,000	$ 600	$ 4,500	$ 900	$ 450	$ 750	$ 10,200	
	Benefits		7.5%			200	-	300	100	-	100	700	
	Total Incremental Labor					$ 3,200	$ 600	$ 4,800	$ 1,000	$ 450	$ 850	$ 10,900	
	Operating Supplies/Maintenance					1,250	300	4,000	300	100	500	6,450	
	Utilities					1,000	600	3,700	600	-	600	6,500	
	Concession Fee 10% Gross							4,000			1,000	5,000	
	Other stipen, mileage, waste					1,000		3,500		-		4,500	
	Overhead		15.0%			1,000	200	3,000	300	100	400	5,000	
	Total Incremental Costs					$ 7,450	$ 1,700	$ 23,000	$ 2,200	$ 650	$ 3,350	$ 38,350	
III.	**REVENUE**					Campsites	Park Cabins	Camp Mgt	Gp. Pavilion	Docks	Rec. Pavilion	TOTAL	
	Number of Facilities					15	3	49	1	1	1		
	Days used per year					90	80	70	50	90	50		
	Fee per use					$35.00	$60.00	$12.00	$200.00	$8.00	$200.00		
	Number of Fees per facility per day					1	1	1	1	60	1		
	Total Incremental Revenue					$ 47,250	$ 14,400	$ 41,160	$ 10,000	$ 43,200	$ 10,000	$ 166,010	
IV.	**INVESTMENT ANALYSIS**					Campsites	Park Cabins	Camp Mgt	Gp. Pavilion	Docks	Rec. Pavilion	TOTAL	
	Net Cash Flow					$ 39,800	$ 12,700	$ 18,160	$ 7,800	$ 42,550	$ 6,650	$ 127,660	
	Initial Investment					361,000	116,000	25,000	46,000	67,000	7,000	622,000	
	Pay Back (years)					9	9	1	6	2	1	5	
	Return on Investment (ROI)					11.02%	10.95%	72.64%	16.96%	63.51%	95.00%	20.52%	
	Internal Rate of Return (IRR)					9.09%	8.99%	72.64%	16.10%	63.51%	95.00%	20.52%	
	Net Present Value (NPV)					$ 78,000	$ 24,000	$ 175,000	$ 40,000	$ 402,000	$ 66,000	$ 785,000	
V.	**BREAK-EVEN ANALYSIS**					Campsites	Park Cabins	Camp Mgt	Gp. Pavilion	Docks	Rec. Pavilion	TOTAL	
	Break-Even Revenue					$ 40,213	$ 12,228	$ 25,269	$ 6,375	$ 6,731	$ 3,985	$ 94,800	
	Break-Even Days used per year per facility					77	68	43	32	14	20		
	Break-Even Fee					$29.79	$50.95	$7.37	$127.50	$1.25	$79.71		
	Break-Even Daily Usage					0.9	0.8	0.6	0.6	9.3	0.4		

Appendix B: Website Links-Pictures and Other Information

To view pictures and other information on facilities similar to those reviewed for this study, type in on your computer the facility and your interest in the facility. Here are some examples:

For pictures of motor home parks, type in-motor home park pictures or RV campground pictures or RV park pictures

For construction and cost information, type in- motor home park construction
One example of an informative site is:
rversonline.org

For pictures of picnic shelters or pavilions type in-picnic shelter pictures
A helpful site for cost of materials is gazebocreations.com

For group cabin pictures, type in-group cabin pictures
One informative site for materials and kits is-cabinkit.com
Some other sites for rental costs and other information are:
ymcarockies.org
bigcabins.com
deerridgecabins.com

For boat storage buildings, type in-steel buildings or steel building pictures.
The following photo gallery and price information on steel buildings is quite informative
bisonsteel.com

For park cabin pictures and other information, type in-park model cabins or park model camper cabins or park model mobile cabins.

These are just a few examples. There are hundreds of others.

Appendix C. Sewer Options for All Existing and Potential Facilities At Kim's Marina and RV Resort

A possibility for sewage treatment at Kim's is to develop an entirely new system that would handle sewage not only for the campsites but for all of the existing and proposed new on-site facilities. An all-inclusive system may be required to handle sewage from the existing system that is questionably already over capacity. If an all-inclusive system was put in place at Kim's, then the cost estimates for each facility requiring the use of the sewage facility would need to be adjusted to reflect the shared cost of the sewage system. Options for a sewage system were developed by Aukerman, Haas & Associates in 2002 for another recreation financial feasibility analysis. The options and costs are based on sewer systems designed to handle a 150 campsite campground that includes a central building with toilets and showers, two SST/CXT type toilets, and a dump station. The sewage capacity needs and system for Kim's should be somewhat similar. However, local County requirements may call for a different system for Kim's. The options and costs for the AHA 2002 study are presented here. In order to update financial figure estimates to approximate 2008 costs, a cost of living increase of at least 3% per year for 6 years, or 18%, needs to be added to 2002 figures.