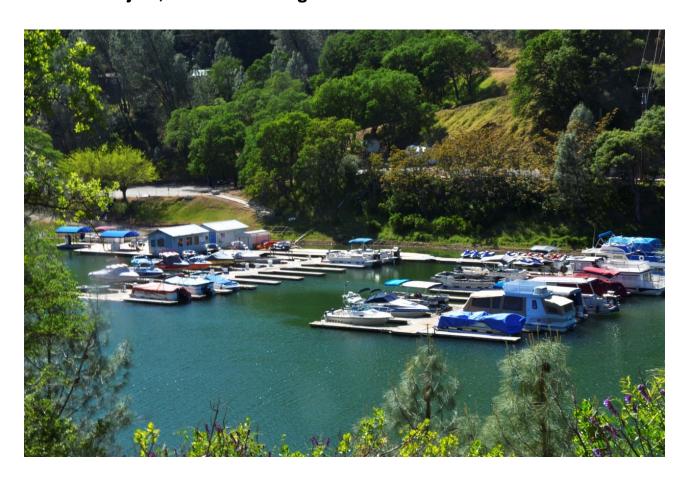
# RECLAMATION

Managing Water in the West

# Markley Cove Marina Concession Expedited Financial Feasibility Evaluation

Lake Berryessa, Napa County, California Solano Project, Mid-Pacific Region





## **Mission Statements**

The mission of the Department of the Interior is to protect and provide access to our Nation's natural and cultural heritage and honor our trust responsibilities to Indian Tribes and our commitments to island communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

# Markley Cove Marina Concession Expedited Financial Feasibility Evaluation

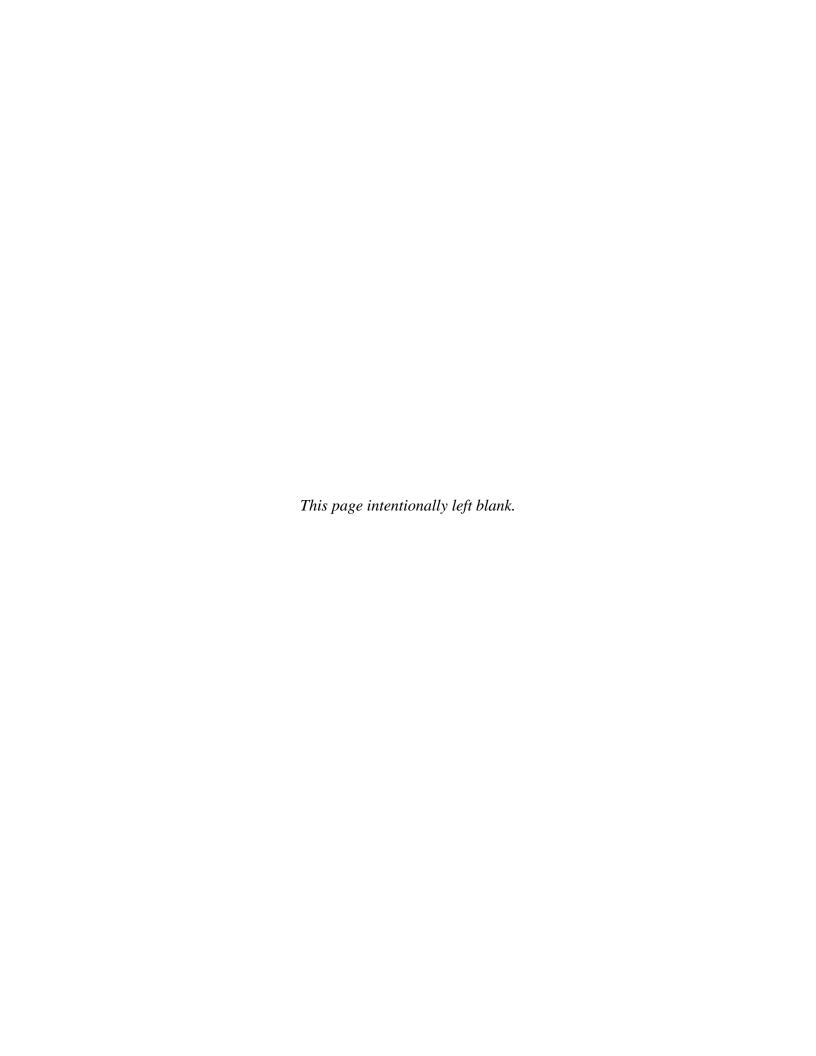
Lake Berryessa, Napa County, California Solano Project, Mid-Pacific Region

*Prepared by* 

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#### 1 INTRODUCTION

The Bureau of Reclamation's (Reclamation) Technical Service Center (TSC) has been commissioned by Reclamation's Central California Area Office (CCAO) to conduct an expedited financial feasibility evaluation (FFE) of future concession opportunities within the Markley Cove Marina Recreation Area (MCMRA). The primary purposes of this FFE are to determine whether the proposed concession opportunities at MCMRA are financially viable over the recommended contract term and to assist Reclamation in the development of a prospectus and ensuing contract for the long-term concession opportunity at MCMRA.

#### 1.1 Markley Cove Marina Concession Area

The MCMRA Recreation Area is located on the southern end of Lake Berryessa, in eastern Napa County, California—approximately 20 miles northeast of Napa, California and 25 miles west of Winters, California.

As currently proposed, the MCMRA will be required to provide the following recreation-related concession facilities and services:

- Full Service Marina
- Fuel Dock
- Marina Store
- Limited Overnight Lodging
- Restaurant
- Watercraft Rental Services
- Day Use Facilities

## 2 Financial Feasibility Evaluation

This section presents the financial evaluation of the proposed concession services at MCMRA. First, a general overview of financial feasibility studies is provided. Second, the framework of an FFE is reviewed including the key factors and assumptions developed for each of the proposed concession services. Third, the summary results of the FFE are reported and discussed. Fourth, a sensitivity analysis is conducted to examine the robustness of the FFE and the significance of the key assumptions on the results of the FFE.

The expedited FFE presented in this study is based on planning-level estimates of capital investments, revenues and expenses. Accordingly, the results of this evaluation are not intended to provide assurances regarding the financial profit or loss of the proposed concession opportunity at MCMRA. The results of this FFE should be considered in the context of the assumptions implicit to this analysis and used as an indicator of the financial performance of the proposed concession. This study has been developed in accordance with Reclamation Manual LND 04-01, as a preliminary assessment of proposed concession opportunities at

MCMRA. It is recommended that prospective concessionaires conduct their own external financial evaluation.

#### 2.1 Overview of Financial Feasibility Evaluation Studies

The primary purpose of this expedited FFE is to determine whether the proposed concession opportunity at MCMRA is financially feasible and viable over the approved 30-year contract term. Additionally, this FFE is developed to assist decision makers in determining the appropriate fees to be returned to the Federal Government and estimating capital investment responsibilities for the concessionaire and Reclamation.

An FFE, in the broadest sense, is the assessment of the potential success (financially feasible) or failure (financially unfeasible) of a business venture. The financial feasibility of a concession opportunity is determined by comparing the financial metrics calculated in an FFE with established thresholds and is considered financially feasible if the calculated metrics meet or exceed these thresholds.

#### 2.2 Financial Feasibility Evaluation Framework

The framework of an FFE is founded on fundamental financial and accounting concepts and reflects the requirements outlined in Reclamation Manual LND 04-01. This Section provides an overview of the financial models that have been developed for the proposed concession opportunity at MCMRA. The following financial models were developed for each of the proposed concession services and summarized in Section 2.5.

#### Income and Expense Statement

An income and expense statement, or simply an income statement, depicts a business' financial status during a specified period. The income statement measures the profitability of a business over the specified period by comparing operating and non-operating revenues and expenses and determining the net income of the business.

For this study, gross revenues and are organized by operating department (i.e., revenue source). For example, a store may realize revenues from gas sales, grocery sales, and fishing supply sales and estimated revenues are tracked separately for each. Operating expenses include payments to labor, management, utilities, repairs and maintenance, etc. Non-operating expenses include general and administrative expenses, such as rent, interest, depreciation, reserve

accounts, and payments to the federal government as franchise and occupancy fees.

Deprecation is a key component of an income statement. Depreciation accounts for the average annual ownership costs related to the reduction of an asset's value between initial capital outlay and the terminal or salvage value of an asset at the end of an asset's useful life. In the context of this analysis, depreciation is a capital recovery mechanism that allows investors to recoup the value of an asset that has been expended to generate revenue.

For this analysis, assets are depreciated using the straight-line depreciation method over the assumed useful life of an asset. The useful life of an asset is defined as the period over which an operation retains and utilizes an asset. The value of the capital investment being depreciated is approximated as the original capital outlay less any estimated salvage or terminal value remaining at the end of an asset's useful life. Annual depreciation, under the straight-line method, is calculated by dividing the capital investment value by the number of years in the asset's useful life.

#### Cash-Flow Analysis

In contrast to an income statement, a cash-flow analysis takes into account the timing of revenues and expenses, allowing an analyst to evaluate the financial performance of a business at different periods of time. A cash-flow analysis does not allow for the depreciation of assets as it looks at when cash resources are actually expended, not with the changing value of an asset (i.e., depreciation is a non-cash expense). The cash-flow analysis also takes into account the timing of expenditures for the periodic replacement and maintenance of capital and any revenue from the selling off of assets.

#### Capital Investment Requirements

The capital investment requirements of any business venture can greatly affect its financial feasibility. Capital costs associated with the proposed concession services at MCMRA include the costs of purchasing the current concessionaire's assets required to be retained, additional facility development and concession services (e.g., structures, utilities, watercraft); outfitting facilities, landscaping, etc.; and any ongoing capital replacement. The estimated capital investments required by prospective concessionaires were prepared by CCAO and appraisals of the current concessionaire's assets as determined by the Department of the Interior's Office of Valuation Services. The *base case* or *baseline* assumptions for the capital investment estimates are discussed separately for each service to be provided at MCMRA in Section 2.5.

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<sup>&</sup>lt;sup>1</sup> For this Analysis, reserve accounts are assumed to be a Reserve Account for Facility Improvement (RAFI). A RAFI is an account which sets funds aside for systematical available ongoing improvements, construction, and renovation of concession facilities, specifically, significant nonrecurring capital improvement projects.

<sup>&</sup>lt;sup>2</sup> Appraised value based on the March 23, 2015 and April 6, 2016 Depreciated Cost Analyses conducted by the U.S. Department of the Interior Office of Valuation Services.

<sup>&</sup>lt;sup>3</sup> The most plausible estimates given current information and data constraints.

#### 2.3 Measures of Financial Feasibility

Profitability is the primary goal of all business ventures—without profitability a business will not be sustainable over the long-term. As such, determining the financial feasibility of a business typically involves some measure of profitability. Common financial metrics for determining profitability include net profit (income statement); earnings before interest, taxes, depreciation, and amortization (EBITDA); net present value (NPV) of annual cash flow; and internal rate of return (IRR).

Net profits are calculated as the difference between revenues from all sources and any associated costs, including depreciation. The calculation includes both operating and non-operating revenues—the former arising from the actual sale of the specific goods and services produced by the enterprise and the latter from interest income or the like. Non-operating costs reflect the administrative and related expenses required for running a business, but not specific to an individual good or service. If net profits are determined to be positive, a business is expected to be profitable. However, this metric does not take into account the timing of revenues and expenses and alone is not sufficient for determining the long-run financial viability of a business.

EBITDA is a quantitative description of the *operating profitability* of a business. It is measured by subtracting operating and non-operating costs—excluding interest, taxes, depreciation, and amortization—from total operating revenues. These costs are excluded because they may vary significantly even among businesses of similar size within the same industry. Because EBITDA excludes these expenses, it is considered a better measure than net profit of the actual operating finances of a business. Differences arise between net profit and EBITDA because of variation 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 when loans were obtained, amount debt financed, term length, and guarantees and collateral required by lenders
- **Depreciation**—will differ depending on the useful life of capital assets, salvage value of capital assets, and when they were purchased.
- **Taxes**—will vary depending on different rate structures, etc. (e.g., federal, state, county, income level)

• **Amortization**—which typically refers to the payment of a loan over a specified number of periods and differs based on term length and the cost of capital (interest)

The following financial metrics (i.e., NPV and IRR) vary from net profits and EBITDA in that they account for the timing of revenues and costs and take into consideration the *time value of money* (TVM). The underlying premise of the TVM is that individuals have a time preference with regard to when they receive money, which implies that, in general, a dollar received today is valued more than a dollar received in the future. Money may have a time value for at least three reasons: (1) an individual's time preference, (2) due to the uncertainty of future conditions, and (3) opportunity cost of capital—the forgone return that could have be earned on an alternative investment the next best alternative investment (opportunity cost of capital).

The NPV of an enterprise's cash flow can be defined as the *present value*<sup>4</sup> of cash inflows minus the present value of cash outflows. The present value of a cash flow is calculated by discounting the future worth of a cash flow to the value of the cash flow in the base year at a specified discount rate (threshold rate). If the NPV of annual cash flows is greater than zero, then the return on investment is greater than the threshold rate and the business opportunity is considered financially viable.

The IRR metric, as contrasted to the NPV, does not calculate the present value of cash inflow and outflows, but rather solves for the discount rate which equates the present value of the cash inflows to the present value of the cash outflows (NPV=0). The computed IRR discount rate is equivalent to the annualized effective compounded return rate earned on capital invested in an enterprise. In other words, over the investment period, an investor can likely expect to receive a return on invested capital equal to the discount rate computed in the IRR approach.

### 2.4 Key Factors Affecting Financial Feasibility

There are a number of key factors in common to all the proposed recreation services that influence the financial feasibility of all of the proposed concession opportunity at MCMRA. Each factor is discussed in general below and by service in Section 2.5.

#### Visitation Levels

The primary factor affecting the financial feasibility of concession opportunities is recreation visitation. An initial estimate of average annual visitation for the proposed MCMRA was developed based on visitor count data provided by CCAO from the historical concession operations at MCMRA from 2012–2014. The

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<sup>&</sup>lt;sup>4</sup> The worth of an asset (e.g., cash) in the base or study year.

baseline visitation estimate for year one of the proposed 30-year contract term is set to the annual average of the provided visitor count data of roughly 67,000.

In addition to the estimation of the year one base case conditions, visitation estimates were forecasted into the future over the proposed contract term. The baseline condition for visitation growth was estimated at 0.9 percent annually. The 0.9 percent growth rate reflects the population projection for the market area between 2020 and 2050 (California Department of Finance). Note that this study does not explore the possible effects of water level fluctuations at Lake Berryessa on demand for concession services at MCMRA.

#### Length of Season

The expected length of the recreation season can have a significant impact on the FFE at MCMRA. The length of the recreation season is primarily driven by weather conditions (e.g., air and water temperatures) and type of recreation activity. For this analysis, based on historical operations at MCMRA, the recreation season is assumed to run all year long from January 1– December 31, only being closed for three major holidays, equating to an average of 362 days of operation a year.

#### 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. 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

For this analysis, the further concession contract term has been set to a length of 30-years.

#### Reasonable Rate of Return on Capital Investment

By definition, capital is a scarce resource with many potential uses, returns, and risks. Investors of capital can be reasonably assumed to seek a minimum level of financial return on the capital they invest. Commonly, the minimum level is approximated as the sum of a relatively risk-free return (e.g., U.S. Government debt instruments) and an allowance for risk. The incremental desired return for risk varies widely among capital investors, depending on such factors as their experience in particular business and the uncertainties (risks) related to a certain investment. For example, if a government security yields a risk-free two percent annual return and a capital investor requires an additional annual return of eight percent to compensate for their risk, the minimum annual return an investor would accept is 10 percent.

Capital investments in concession opportunities at Reclamation facilities are not risk-free investments and face many potential uncertainties that can have positive and negative impacts on returns. For example, uncertainties such as future

visitation levels, the terminal value and ability to sell remaining concession assets at the end of a contract term, and Reclamation project conditions (e.g., reservoir levels) can all impact returns. Reclamation has historically recognized that a baseline IRR of 10 percent allows for a reasonable rate of return on capital investments in a concession opportunity at Reclamation projects and indicates that a concession is financially viable over the period of analysis. Historically, if warranted by atypical risks and uncertainties, the baseline rate of 10 percent has been allowed to incrementally be adjusted upward in conjunction with the degree of uncertainty in an investment, up to an IRR of 12 percent.

#### 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 fees, and various forms of occupancy fees (e.g., lease fee). Franchise fees are typically payments made to the government based on a percentage of gross revenues. Occupancy fees are often a form of flat-rate fees paid by the concessionaire for the use of the federal facilities/estate. Fees paid to the federal government are typically negotiated during the competitive solicitation process, on a case-by-case basis, depending on the specific circumstances of each concession opportunity.

# 2.5 Financial Feasibility Evaluation of Proposed Commercial Services at Markley Cove Marina

This section presents the assumptions and results of the financial feasibility evaluation for prospective concession services at Markley Cove Marina. First, the baseline FFE assumptions common to all services are identified and presented. Second, the financial performance of the proposed concession services at MCMRA is evaluated and reported using key financial metrics based on estimates of capital investment costs, annual operating income and expenses, and anticipated cash-flow. In the final section of the FFE, a sensitivity analysis is conducted; examining the degree to which uncertainties in key assumptions could potentially impact the financial feasibility of the concession opportunity at MCMRA.

The focus of the FFE is on those services that would be operated under concessions contracts, rather than a special use permit. Only the required minimum services are included in this analysis; other authorized uses and services, which may be provided at the discretion of the concessionaire upon approval from Reclamation, are excluded from this analysis.

#### 2.5.1 Common Analytical Assumptions

For the purposes of this FFE, several key assumptions are applicable to all concession opportunities under review. The varying of these key assumptions will affect the financial feasibility of the concession opportunities to some degree,

as is illustrated by the sensitivity analysis in Section 2.5.6. The following is a list of the key assumptions and their respective baseline parameters:

- <u>Visitation</u>—As discussed in Section 2.4, visitation is projected to increase by approximately 0.9 percent annually based on population growth estimates in the primary market area.
- <u>Discount Rate</u>—The discount rate is set at Reclamation's baseline reasonable rate of return threshold of 10 percent.
- <u>Fees Paid to the Federal Government</u>—For evaluation purposes, the baseline franchise fee in this analysis has been set to 3.5 percent of gross receipts.
- Reserve Fund—Two percent of gross receipts is to be set aside in a reserve fund for ongoing capital replacement. The reserve fund is in addition to the regular maintenance costs calculated for each concession service.
- Interest (Cost of Capital)—Due to the large degree of speculation required to estimate interest expenses (e.g., amount of capital financed and loan terms), they are not typically included in capital budgeting (income expense statement). Further, the basic economic decisions of whether a particular project should be undertaken or not should not be influenced because of the current funding source available. Interest payments should never be included in a discounted cash flow analysis as all financing costs and their associated tax implications are accounted for in the discounting mechanism.
- <u>Taxes</u>—Taxes, like interest expenses, are highly variable and speculative. However, unlike interest expenses, all potential concessionaires will face tax related expenses. Thus, a baseline tax expense is included in the FFE and approximated as 15 percent of the difference between EBITDA and depreciation.
- Operating Expenses (excluding labor costs)—Operating expenses are calculated as a percentage of the gross margin<sup>5</sup> for each service. The percentage estimates are held constant for each service and were developed by surveying financial reports from comparable concession operations, reported industry standards, and other similar financial studies. Although the total dollar value of operating expenses will vary between services, based on gross margin, the proportion of operating revenues remains the same.
- <u>Initial Investment Costs</u>— The initial investment costs specific to a particular concession service were derived from three separate sources: 1) Department of the Interior's Office of Valuation Services' (OVS) appraised value of the fixed assets to be retained from the previous

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<sup>&</sup>lt;sup>5</sup> An enterprise's remaining revenue after the cost-of-goods-sold (COGS) have been subtracted from gross revenues. [Gross Margin = Net Sales – COGS]

concession operators, <sup>6</sup> 2) new required capital improvement costs as defined and estimated by CCAO (see Table 1 in Appendix A), and 3) expected additional capital investments in depreciable assets based on historical Markley Cove and comparable concession operations.

- <u>Joint Investment Costs</u>—Joint investment costs are those costs that could not be identified as specific to a particular concession service, such as the required costs of grinding and repaving access roads. Joint costs are distributed amongst individual concession services based on the proportion of each service's contribution to the total gross margin generated by the proposed concession services at MCMRA.
- <u>Labor Costs</u> Labor costs were based on estimated hours per day allocated to various tasks (e.g., landscaping & maintenance) and 2015 median wage rates estimates for the Sacramento, CA market area from the Bureau of Labor Statistics (BLS).<sup>7</sup>
- <u>Depreciation</u> A straight line depreciation method is utilized, i.e., costs are charged evenly over the useful life of an asset.
- <u>Dollar Values (Price Level)</u> All costs and revenues have been placed in 2015 dollars utilizing multiple methods including the Consumer Price Index (CPI).<sup>8</sup>

#### 2.5.2 Marina Services

#### Description & Design

The required marina services are to include a total of 341 boat slips and houseboat moorings, a fuel dock, houseboat pump-out station, fish cleaning station, and other infrastructure to support the marina.

The required marina facilities will include of the following:

- 70 uncovered boat slips
- 233 covered boat slips
- 38 houseboat moorings
- 8 courtesy boat slips
- Fuel dock

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<sup>&</sup>lt;sup>6</sup> Appraised value based on the March 23, 2015 and April 6, 2016 Depreciated Cost Analyses conducted by the U.S. Department of the Interior Office of Valuation Services.

<sup>&</sup>lt;sup>7</sup> Bureau of Labor Statistics, U.S. Department of Labor, *Occupation Employment Statistics* [March, 2016] [http://www.bls.gov/oes/current/oes\_40900.htm#37-0000]

<sup>&</sup>lt;sup>8</sup> Bureau of Labor Statistics, U.S. Department of Labor, *Consumer Price Index – All Urban Consumers* [March, 2016] [http://www.bls.gov/cpi/#data]

#### Capital Investment Costs

Table 2.5.2-1 reports the estimated total initial capital investment necessary to provide the required marina services. The total initial capital outlay necessary to provide the required marina services is estimated at nearly \$5,010,000.

Table 2.5.2-1. Marina Services: Initial Capital Investment (2015\$)

Specific Costs	
2015 OVS Appraisal	\$2,853,724
2016 OVS Appraisal	\$578,000
New Required Capital Improvements	\$0
Total Specific Costs	\$3,431,724
Joint Costs	
2015 OVS Appraisal	\$776,950
2016 OVS Appraisal	\$1,193,180
Additional Capital Investments	\$937,832
Total Joint Costs	\$2,907,962
Projected Proportion of Gross Margin	54.1%
Total Joint Costs Allocated to Marina Services	\$1,573,208
Grand Total Initial Investment Required in Marina Services	\$5,004,932

#### Revenues

The marina services generate revenue by offering slips for rental, marina launch fees, fuel and oil sales, and parking fees. Revenues for slip and mooring rentals are calculated by multiplying estimated slip and mooring rental rates by the estimated occupancy rate. Revenues from marina launch, fuel and oil sales, and parking fee were all determined based on historical sales per visitor at MCMRA and other similar concession operations. Rental and occupancy rates were estimated by surveying historical operations at MCMRA. Table 2.5.2-2 summarizes the rates utilized in this analysis.

Table 2.5.2-2. Revenue Assumptions for Marina Services (2015\$)

Service	Rate Per Use
Daily Launch Fee	
Low Season	\$15.00
High Season	\$20.00
Weighted Launch Fee	\$18.50
Season Launch Fee (Jan-Dec)	\$300.00
Parking Fees	
Overnight	\$20.00
Additional Fees	
Weekdays	\$10.00
Weekends	\$20.00
Weighted Parking Fee Adjusted for Occupancy	\$17.50
Avg Fuel & Oil Sales per Launch	\$20.00
Slip Rental Fees	(341 Total Slips)
Average for all slips, mooring, and overnight	\$2,300.00
Annual Slip Rental Fees	
Average Covered (233 Slips)	\$2,260
Average Uncovered (70 Slips)	\$1,669
Average Annual Occupancy Rate	95%

#### Operating Expenses

Operating expenses for marina services include labor costs and the other operating costs identified below in Table 2.5.2-3. As stated in the common assumptions, operating expenses for marina services were developed based primarily on historical annual financial statements from MCMRA and similar type concession operations. Labor costs were developed by approximating the hours per day spent on various tasks and a BLS wage rate. Over the contract period, annual labor costs (hours and wages) are assumed to be constant in real dollar terms. The estimated operating costs as a percentage of gross margin can be found in Table 2.5.2-3 and annual labor cost estimates in Table 2.5.2-4.

Table 2.5.2-3. Estimated Operating Costs for Marina Services

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Cost	Percentage of Gross Margin					
Repair/Maintenance Labor & Supplies	3.00%					
General & Administrative	1.50%					
Legal & Professional Fees	1.75%					
Insurance	6.50%					
Utilities	4.75%					
Miscellaneous	5.25%					
Management	6.00%					
Total	28.75%					

Table 2.5.2-4. Estimated Labor Costs for Marina Services

Task	Hour/Unit/ Day	Units	Total Hours /Day	Days in Operation	Total Annual Hours	Median Wage \$/hour	Annual Labor Cost
Maintenance/Cleaning/ Grounds keeping	3.00	1	3.00	363	1089	\$12.78	\$13,917
Counter & Rental Clerk	4.29	3	12.86	363	4667	\$12.41	\$57,919
Assumed Wage Rates						Subtotal	\$71,836
Occupation	Med	lian \$/Hou	r (2015\$)		15% Benefits & Contingency	\$ 10,775	
Landscaping & Ground Worker	\$12.78			Total	\$82,612		
Counter & Rental		\$12.4	1			+,•· <b>-</b>	

#### 2.5.3 Lodging Services

#### Description & Design

The required lodging services are to include a total of 10 cabins and other support infrastructure. The lodging inventory will consist of eight cabins retained from the existing concession and two additional cabins that are assumed to be installed in year two of the 30-year contract term.

#### Capital Investment Costs

Table 2.5.3-1 reports the estimated total initial capital investment necessary to provide the required lodging services. The total initial capital outlay necessary to provide the required lodging services is estimated to be nearly \$852,000.

Table 2.5.3-1. Lodging Services: Initial Capital Investment (2015\$)

Specific Costs	
2015 OVS Appraisal	\$407,336
2016 OVS Appraisal	\$34,400
New Required Capital Improvements (Year 2 Investment)	\$183,908
Total Specific Costs	\$625,644
Joint Costs	
2015 OVS Appraisal	\$776,950
2016 OVS Appraisal	\$1,193,180
Additional Capital Investments	\$937,832
Total Joint Costs	\$2,907,962
Projected Proportion of Gross Profit	7.8%
Total Joint Costs Allocated to Lodging Services	\$226,821
Grand Total Initial Investment Required in Lodging Services	\$852,465

#### Revenues

The lodging services generate revenue by offering short-term accommodations for rent. Revenues for short-term accommodations are calculated as the product of estimated average annual nightly rental rates, the average annual number of nights available for rent, and the estimated average annual occupancy rate. Rental and occupancy rates were estimated by surveying historical operations at MCMRA. Table 2.5.3-2 summarizes the rates utilized in this analysis.

Table 2.5.3-2. Revenue Assumptions for Lodging Services (2015\$)

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Service	Rate Per Use
Lodging Rental Period	
Average Annual	\$157.00
High Recreation Season (Apr-Oct)	\$156.00
Off-Season Recreation (Nov-Mar)	\$168.00
Number of Cabins Available for Rent Nightly	8
Average Total Nights Available for Rent Annually for Years 1&2	2845
Average Total Nights Available for Rent Annually for Years 3-30	3518
Average Annual Occupancy Rate	31%

#### Operating Expenses

Operating expenses for lodging services include labor costs and the other operating costs identified below in Table 2.5.3-3. As stated in the common assumptions, operating expenses for lodging services were developed based primarily on historical annual financial statements from MCMRA and similar type concession operations. Labor costs were developed by approximating the hours per day spent on various tasks and the BLS occupational wage rate. Over the contract period, annual labor costs (hours and wages) are assumed to be constant in real dollar terms. The estimated operating costs as a percentage of

gross margin can be found in Table 2.5.3-3 and annual labor cost estimates in Table 2.5.3-4.

Table 2.5.3-3. Estimated Operating Costs for Lodging Services

Cost	Percentage of Gross Margin
Repair/Maintenance Labor & Supplies	3.00%
General & Administrative	1.50%
Legal & Professional Fees	1.75%
Insurance	6.50%
Utilities	4.75%
Miscellaneous	5.25%
Management	6.00%
Total	28.75%

Table 2.5.3-4. Estimated Labor Costs for Lodging Services

Task	Hour/Unit/ Day	Units <sup>1</sup>	Total Hours /Day	Days in Operation	Total Annual Hours	Median Wage \$/hour	Annual Labor Cost
Housekeeping	2.00	1.27	2.54	363	924	\$10.81	\$9,984
Maintenance/Cleaning/ Grounds keeping	1.00	0.35	0.35	363	128	\$12.78	\$1,637
Assumed Wage Rates						Subtotal	\$11,621
Occupation	Medi	an \$/Hou	r (2015\$)		15% Benefits & Contingency	\$1,743	
Landscaping & Ground Worker	\$12.78			Total	\$13,364		
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<sup>1</sup>Average annual number of room turnovers for housekeeping.

#### 2.5.4 Watercraft Rental Services

#### Description & Design

The required watercraft rental services are to include a total of 15 personal watercraft, 5 ski boats, 2 non-motorized fishing boats, and other support infrastructure.

#### Capital Investment Costs

Table 2.5.4-1 reports the estimated total initial capital investment necessary to provide the required watercraft rental services. The total initial capital outlay necessary to provide the required watercraft rental services is estimated to be nearly \$1,230,000.

Table 2.5.4-1. Watercraft Rental Services: Initial Capital Investment (2015\$)

Specific Costs	
2015 OVS Appraisal	\$0
2016 OVS Appraisal	\$0
New Required Capital Improvements (New Watercraft Purchased every 6 <sup>th</sup> Year)	\$483,000
Total Specific Costs	\$483,000
Joint Costs	
2015 OVS Appraisal	\$776,950
2016 OVS Appraisal	\$1,193,180
Additional Capital Investments	\$937,832
Total Joint Costs	\$2,907,962
Projected Proportion of Gross Profit	25.8%
Total Joint Costs Allocated to Watercraft Rental Services	\$750,254
Grand Total Initial Investment Required in Watercraft Rental Services	\$1,233,254

#### Revenues

Watercraft rental services generate revenue by offering watercraft for short-term rentals. Revenues for watercraft rental services are calculated as the product of estimated average rental rates and the average number of times each type of watercraft is rented out. Rental rates and average annual rentals were estimated by surveying historical operations at MCMRA. Table 2.5.4-2 summarizes the rates utilized in this analysis.

Table 2.5.4-2. Revenue Assumptions for Watercraft Rental Services (2015\$)

		Avg. Annual No. of	No. of
Rental Type	Rate Per Use	Times Unit is Rented	Units
Personal Water Craft	\$225.00	114	15
Ski Boats	\$265.00	114	5
Fishing Boat (Non-motorized)	\$62.50	114	2

#### Operating Expenses

As stated in the common assumptions, operating expenses for watercraft rental services were developed based primarily on historical annual financial statements from MCMRA and similar type concession operations. Labor costs were developed by approximating the hours per day spent on various tasks and the BLS occupational wage rate. Over the contract period, annual labor costs (hours and wages) are assumed to be constant in real dollar terms. The estimated operating costs as a percentage of gross margin can be found in Table 2.5.4-3 and annual labor cost estimates in Table 2.5.4-4.

Table 2.5.4-3. Estimated Operating Costs for Watercraft Rental Services

Cost	Percentage of Gross Margin
Repair/Maintenance Labor & Supplies	3.00%
General & Administrative	1.50%
Legal & Professional Fees	1.75%
Insurance	6.50%
Utilities	4.75%
Miscellaneous	5.25%
Management	6.00%
Total	28.75%

Table 2.5.4-4. Estimated Labor Costs for Watercraft Rental Services

Table 2.5.4-4. Estimated Labor Costs for WaterCraft Rental Services							
Task	Hour/Unit/ Day	Units	Total Hours /Day	Days in Operation	Total Annual Hours	Median Wage \$/hour	Annual Labor Cost
Motorboat Mechanics & Service Techs	5.71	1.00	5.71	240	1371	\$16.77	\$22,999
Maintenance/Cleaning/ Grounds keeping	1.00	1.00	1.00	240	240	\$12.78	\$3,067
Assumed Wage Rates						Subtotal	the nee
		•				Jubiciai	\$26,066
Occupation			ian \$/Hou	r (2015\$)		15% Benefits & Contingency	\$3,910
Occupation  Landscaping & Ground  Worker	ı			• • •		15% Benefits &	, ,

#### 2.5.5 Marina Store Services

#### Description & Design

The required marina store services include a main marina retail store, on-dock marina convenience store, and supporting infrastructure.

#### Capital Investment Costs

Table 2.5.5-1 reports the estimated total initial capital investment necessary to provide the required marina store services. The total initial capital outlay necessary to provide the required marina store services is estimated to be nearly \$750,000.

Table 2.5.5-1. Marina Store Services: Initial Capital Investment (2015\$)

Specific Costs	
2015 OVS Appraisal	\$625,981
2016 OVS Appraisal	\$0
New Required Capital Improvements	\$18,240
Total Specific Costs	\$644,221
Joint Costs	
2015 OVS Appraisal	\$776,950
2016 OVS Appraisal	\$1,193,180
Additional Capital Investments	\$937,832
Total Joint Costs	\$2,907,962
Projected Proportion of Gross Profit	3.6%
Total Joint Costs Allocated to Watercraft Rental Services	\$104,687
Grand Total Initial Investment Required in Watercraft Rental Services	\$748,908

#### Revenues

Marina store services generate revenue by offering goods for sale. Revenues for marina store services are calculated as the product of an estimated average value of goods purchased per MCMRA visitor and the average number of annual MCMRA visitors. The average value of goods purchased per visitor was estimated by surveying historical operations at MCMRA and other similar concession operations. Table 2.5.5-2 summarizes the values utilized in this analysis.

Table 2.5.5-2. Revenue Assumptions for Marina Store Services (2015\$)

Coods	Avg Annual Revenue	Annual Visitation	Avg Value of Goods Purchased
Goods	(Year 1)	(Year 1)	per Visitor
Grocery	\$128,933	66531	\$1.94
Apparel	\$17,901	66531	\$0.27
Cigarettes	\$6,682	66531	\$0.10
Sundries	\$8,373	66531	\$0.13
Fishing Tackle	\$6,780	66531	\$0.10
Jewelry/Gifts	\$6,190	66531	\$0.09
Recreation/sport	\$10,634	66531	\$0.16
Motor Accessories	\$7,916	66531	\$0.12

#### Operating Expenses

As stated in the common assumptions, operating expenses for marina store services were developed based primarily on historical annual financial reports from MCMRA and similar type concession operations. Labor costs were developed by approximating the hours per day spent on various tasks and the BLS occupational wage rate. Over the contract period, annual labor costs (hours and wages) are assumed to be constant in real dollar terms. The estimated operating costs as a percentage of gross margin can be found in Table 2.5.5-3 and annual labor cost estimates in Table 2.5.5-4.

Table 2.5.5-3. Estimated Operating Costs for Marina Store Services

Cost	Percentage of Gross Margin
Repair/Maintenance Labor & Supplies	3.00%
General & Administrative	1.50%
Legal & Professional Fees	1.75%
Insurance	6.50%
Utilities	4.75%
Miscellaneous	5.25%
Management	6.00%
Total	28.75%

Table 2.5.5-4. Estimated Labor Costs for Marina Store Services

Table 2.3.3-4. Latille	<u> </u>	-	<u> </u>	ia cioi c	7. 7.000			
Task	Hour/Unit/ Day	Units	Total Hours /Day	Days in Operation	Total Annual Hours	Median Wage \$/hour	Annual Labor Cost	
Counter & Rental Clerk	1.43	3.00	4.29	363	1556	\$12.41	\$19,306	
Maintenance/Cleaning/ Grounds keeping	1.00	1.00	1.00	363	363	\$12.78	\$4,639	
Assumed Wage Rates					Subtotal	\$23,945		
Occupation	Occupation		Median \$/Hour (2015\$)			15% Benefits & Contingency	\$3,592	
Landscaping & Ground Worker	ls Keeping	\$12.78		ping			Total	\$27,537
Counter & Rental Clerk		\$12.41			· otal	<b>42.</b> ,001		

#### 2.5.6 Day Use Services

#### Description & Design

The required day use services include five day use sites, adequate number of picnic tables and grills for day use sites, and supporting infrastructure.

#### **Capital Investment Costs**

Table 2.5.6-1 reports the estimated total initial capital investment necessary to provide the required day use services. The total initial capital outlay necessary to provide the required day use services is estimated to be roughly \$30,000.

Table 2.5.6-1. Day Use Services: Initial Capital Investment (2015\$)

Specific Costs	
2015 OVS Appraisal	\$0
2016 OVS Appraisal	\$0
New Required Capital Improvements	\$21,896
Total Specific Costs	\$21,896
Joint Costs	
2015 OVS Appraisal	\$776,950
2016 OVS Appraisal	\$1,193,180
Additional Capital Investments	\$937,832
Total Joint Costs	\$2,907,962
Projected Proportion of Gross Profit	0.3%
Total Joint Costs Allocated to Watercraft Rental Services	\$8,724
Grand Total Initial Investment Required in Watercraft Rental Services	\$30,620

#### Revenues

Day use services generate revenue by offering day use sites for rent. Revenues for day use services are calculated as the product of the rental rate, the estimated occupancy rate, the number of day use sites, and the average annual number of days that day use sites are available for rent. Rental rates and occupancy rates were estimated by surveying historical operations at concession operations comparable to the proposed MCMRA concession. Table 2.5.6-2 summarizes the rates utilized in this analysis.

Table 2.5.6-2. Revenue Assumptions for Day Use Services (2015\$)

Table 2:0:0 2: Neveriae Assamptions for Bay Ose Oct vides (20104)					
Service	Rate Per Use	No. of Units			
Day Use Site	\$10.00	5			
Average Annual Total Number of					
Days Available for Rent	30	63			
Occupancy Rate	30	)%			

#### Operating Expenses

As stated in the common assumptions, operating expenses for day use services were developed based primarily on similar type concession operations. Labor costs were developed by approximating the hours per day spent on various tasks and the BLS occupational wage rate. Over the contract period, annual labor costs (hours and wages) are assumed to be constant in real dollar terms. The estimated operating costs as a percentage of gross margin can be found in Table 2.5.6-3 and annual labor cost estimates in Table 2.5.6-4.

Table 2.5.6-3. Estimated Operating Costs for Day Use Services

Cost	Percentage of Gross Margin
Repair/Maintenance Labor & Supplies	0.75%
General & Administrative	0.38%
Legal & Professional Fees	0.44%
Insurance	1.63%
Utilities	1.19%
Miscellaneous	1.31%
Management	6.00%
Total	11.69%

Table 2.5.6-4. Estimated Labor Costs for Day Use Services

Table 2.3.0 T. E3ti								
Task	Hour/Unit/ Day	Units	Total Hours /Day	Days in Operation	Average Annual Occupancy Rate	Total Annual Hours	Median Wage \$/hour	Annual Labor Cost
Maintenance/Cleaning/ Grounds keeping	0.25	5.00	1.25	363	33%	152	\$12.78	\$1,939
Assumed Wage Rates						Subtotal	\$1,939	
Occupation	ı	Median \$/Hour (2015\$		ır (2015\$)			15% Benefits & Contingency	\$291
Landscaping & Ground Worker	ds Keeping	\$12.78				Total	\$2,230	

#### 2.5.7 Restaurant Services

#### Description & Design

The required restaurant services include a 1000 square foot casual restaurant, restaurant outfitting costs, and supporting infrastructure.

#### Capital Investment Costs

Table 2.5.7-1 reports the estimated total initial capital investment necessary to provide the required restaurant services. The total initial capital outlay necessary to provide the required restaurant services is estimated to be nearly \$623,000.

Table 2.5.7-1. Restaurant Services: Initial Capital Investment (2015\$)

Specific Costs	
2015 OVS Appraisal	\$0
2016 OVS Appraisal	\$0
New Required Capital Improvements	\$380,800
Total Specific Costs	\$380,800
Joint Costs	
2015 OVS Appraisal	\$776,950
2016 OVS Appraisal	\$1,193,180
Additional Capital Investments	\$937,832
Total Joint Costs	\$2,907,962
Projected Proportion of Gross Profit	8.4%
Total Joint Costs Allocated to Watercraft Rental Services	\$244,269
Grand Total Initial Investment Required in Watercraft Rental Services	\$625,069

#### Revenues

Restaurant services generate revenue by offering the food and beverages for sale. Revenues for restaurant services are calculated as the product of the average sales per visitor, the estimated annual percentage of MCMRA visitors that frequent the restaurant, and the average annual MCMRA visitation. Average sales and visitor rates were estimated by surveying historical operations at concession operations comparable to the proposed MCMRA concession. Table 2.5.7-2 summarizes the rates utilized in this analysis.

Table 2.5.7-2. Revenue Assumptions for Day Use Services (2015\$)

Service	Rate Per Use	Visitor Rate
Casual Restaurant	\$10.00	35%
Average Annual MCMRA Visitation	75,9	989

#### Operating Expenses

Operating expenses for restaurant services were developed based primarily on similar type concession operations with established restaurants. Labor costs were estimated as a percentage of gross revenue at the rate recommended by the National Restaurant Association Restaurant Operation Report (2013–2014)

edition). The estimated operating costs as a percentage of gross margin can be found in Table 2.5.7-3 and annual labor cost estimates in Table 2.5.7-4.

Table 2.5.7-3. Estimated Operating Costs for Restaurant Services

Cost	Percentage of Gross Margin
Repair/Maintenance Labor & Supplies	3.00%
General & Administrative	1.50%
Legal & Professional Fees	1.75%
Insurance	6.50%
Utilities	4.75%
Miscellaneous	5.25%
Management	6.00%
Total	28.75%

Table 2.5.7-4. Estimated Labor Costs for Restaurant Services

Cost	Percentage of Gross Revenues
Labor Costs for a Casual	
Restaurant	29%

#### 2.5.8 Financial Feasibility Evaluation Summary

#### Capital Investment Costs

In total, it is estimated that prospective concessionaires will be required to provide around \$8,495,000 in initial capital investments, including the year two investment in two additional cabins, in order satisfy contract requirements. The total initial capital investments by service are shown in Table 2.5.8-1

Table 2.5.8-1. Initial Capital Investment Costs for All Services (2015\$)

Marina Services	\$5,004,932
Lodging Services <sup>1</sup>	\$852,465
Watercraft Rental Services	\$1,233,254
Marina Store Services	\$748,908
Day Use Services	\$30,620
Restaurant Services	\$625,069
Grand Total Investment Costs	\$8,495,248

Includeds the \$183,908 investment for two additional cabins in year two of the contract term.

#### Income and Expense Statement

The summary income and expense statement developed for the proposed MCMRA concession opportunity is displayed in 2.5.8-2. Accounting for revenues and expenses for each service, estimates of EBITDA for the entire operation average roughly \$1,238,000 per year. Average annual net profits are estimated to be approximately \$699,000, with total cumulative profits of approximately \$20,980,000 over the contract term. These results indicate, based on the estimated capital investments and assumptions made in this FFE, the MCMRA concession opportunity would likely be a financially feasible and profitable business venture over the proposed 30-year contract term.

Table 2.5.8-2. Summary Income and Expense Statement (2015\$ - Baseline Conditions)

Average Annual Values						
Years	1-10	11-20	21-30	Term Totals		
Total Visitation	69291	75786	82889			
Revenues By Service						
Marina Services	\$1,294,535	\$1,346,038	\$1,402,367			
Lodging	\$149,579	\$169,863	\$181,578			
Watercraft Rental Operation	\$502,518	\$549,621	\$595,400			
Marina Store	\$201,433	\$220,314	\$240,965			
Day-use Services	\$5,671	\$6,188	\$6,353			
Restaurant	\$242,518	\$265,250	\$290,113			
Total Gross Revenues	\$2,396,254	\$2,557,273	\$2,716,776	\$76,703,041		
Gross Margin by Service						
Marina Services	\$1,114,700	\$1,149,345	\$1,187,238			
Lodging	\$149,579	\$169,863	\$181,578			
Watercraft Rental Operation	\$502,518	\$549,621	\$595,400			
Marina Store	\$70,632	\$77,253	\$84,494			
Day-use Services	\$5,671	\$6,188	\$6,353			
Restaurant	\$162,487	\$177,718	\$194,376			
Total Gross Margin (Revenues - COGS)	\$2,005,587	\$2,129,987	\$2,249,439	\$63,850,135		
Operating Expenses by Service						
Marina Services	\$417,306	\$436,343	\$457,164			
Lodging	\$56,923	\$64,059	\$68,854			
Watercraft Rental Operation	\$175,693	\$192,162	\$208,524			
Marina Store	\$56,834	\$62,161	\$67,988			
Day-use Services	\$2,985	\$3,263	\$3,521			
Restaurant	\$120,635	\$131,942	\$144,309			
Aggregated Expenses	\$830,375	\$889,930	\$950,360	\$26,706,652		
EBITDA	\$1,175,211	\$1,240,057	\$1,299,079	\$37,143,482		
Additional Expenses						
Marina Services	\$287,289	\$292,463	\$298,122			
Lodging	\$44,906	\$47,994	\$49,676			
Watercraft Rental Operation	\$129,371	\$136,557	\$143,487			
Marina Store	\$30,172	\$31,210	\$32,346			
Day-use Services	\$1,219	\$1,284	\$1,279			
Restaurant	\$27,762	\$29,600	\$31,611			
Total Additional Expenses	\$520,719	\$539,108	\$556,521	\$16,163,479		
Net Profit	\$654,493	\$700,950	\$742,558	\$20,980,003		

#### Cash-Flow Analysis

The summary cash-flow analysis for the proposed MCMRA concession opportunity is presented in Table 2.5.8-3. The estimated total initial capital investments required for all of the required MCMRA services are reflected in year 0. At the end of the contract term, cumulative cash holdings are forecasted to be approximately \$20,980,000 with a net-present value (NPV) of -\$34,085 at a 10 percent discount rate. A negative NPV metric signals that the MCMRA concession opportunity, under the baseline assumptions made in this analysis, does not meet Reclamation's reasonable rate of return threshold. However, relative to the total investment, the NPV is just slightly negative indicating that the proposed concession is still likely financially viable over the contract term. Table A-2 has been truncated to show projected single year cash-flows in 10 year increments

Table 2.5.8-3. Summary Cash-Flow Analysis (2015\$ - Baseline Conditions)

	•	·	Year		•
	0	1	10	20	30
Cash Inflow					
Beginning Cash	\$0	(\$8,311,339)	(\$674,823)	\$8,103,610	\$17,661,944
Total Sales	\$0	\$2,307,473	\$2,469,579	\$2,631,119	\$2,773,662
Miscellaneous Revenues	\$0	\$0	\$6,000	\$6,000	\$2,321,075.80
Total Available Cash	\$0	(\$6,003,866)	\$1,800,756	\$10,740,730	\$22,756,682
Cash Outflow					
Cost of Goods Sold	\$0	\$375,105	\$406,606	\$444,718	\$486,404
Labor Costs	\$0	\$222,083	\$240,733	\$263,298	\$287,978
Operating Expenses	\$0	\$438,685	\$468,319	\$496,322	\$519,267
Management		\$138,448	\$148,175	\$157,867	\$166,420
Franchise Fee & Lease Payments	\$0	\$80,762	\$86,435	\$92,089	\$97,078
Reserve Account	\$0	\$46,149	\$49,392	\$52,622	\$55,473
Taxes	\$0	\$137,582	\$148,304	\$157,577	\$164,059
Capital Investments	\$8,311,339	\$0	\$40,000	\$40,000	\$0
Total Cash Out	\$8,311,339	\$1,438,814	\$1,587,964	\$1,704,495	\$1,776,679
Annual Cash- Flow	(\$8,311,339)	\$868,659	\$887,615	\$932,624	\$3,318,059
Cumulative Cash-Flow	(\$8,311,339)	(\$7,442,680)	\$212,792	\$9,036,235	\$20,980,003
Present Value of Annual Cash- Flow (10%)	(\$8,311,339)	\$789,690	\$342,214	\$138,629	\$190,153
Cumulative Present Value of Cash-Flow	(\$8,311,339)	(\$7,521,649)	(\$3,119,792)	(\$1,041,318)	(\$34,085)

#### Financial Summary

The financial feasibility of a concession opportunity is determined by comparing the calculated financial metrics with established thresholds and considered financially feasible if the calculated financial metrics meet or exceed these thresholds. The key financial metric analyzed in this study is the proposed concession's forecasted IRR. As discussed in Section 2.4, Reclamation has historically recognized that an IRR of 10 percent typically allows for a reasonable rate of return on capital investments in a concession opportunity at Reclamation projects and indicates that a concession will be financially viable over the period of analysis. Historically, if warranted by atypical risks and uncertainties, Reclamation has permitted an incremental increase, in proportion to the additional risks, from the baseline rate of 10 percent up to an IRR of 12 percent.

Table 2.5.8-4 displays the summary results of the MCMRA FFE, under the assumed baseline conditions and various franchise fees, as key financial metrics. The results of the MCMRA FFE show that the proposed MCMRA concession opportunity would likely provide a reasonable rate of return and be a financially

viable business venture over the proposed 30-year contract term across the relevant range of potential franchise fees. The MCMRA FFE results show that investment in the proposed MCMRA concession will provide IRRs that range from 11.03 percent at a 0 percent franchise fee to 8.85 percent at a 7 percent franchise fee.

Table 2.5.8-4. MCMRA FFE Results: All Services with Varying Franchise Fees (2015\$)

				Conditions wi		anchise Fees	(Financial Me	etrics)
Franchise Fee	EBITDA (Annual Average)	Net Profit (Annual Average)	Cumulative Net Profit	Annual Average Returns to Federal Government	Cumulative Returns to Federal Government	Cumulative Present Value of Returns to Federal Government	Cumulative Present Value of Cash-flow	IRR
0.0%	\$1,238,116	\$788,820	\$23,664,609	\$0	\$0	\$0	\$775,770	11.03%
0.5%	\$1,238,116	\$776,036	\$23,281,094	\$12,784	\$383,515	\$243,046	\$660,076	10.88%
1.0%	\$1,238,116	\$763,253	\$22,897,579	\$25,568	\$767,030	\$486,093	\$544,383	10.73%
1.5%	\$1,238,116	\$750,469	\$22,514,064	\$38,352	\$1,150,546	\$729,139	\$428,689	10.57%
2.0%	\$1,238,116	\$737,685	\$22,130,548	\$51,135	\$1,534,061	\$972,186	\$312,996	10.42%
2.5%	\$1,238,116	\$724,901	\$21,747,033	\$63,919	\$1,917,576	\$1,215,232	\$197,302	10.27%
3.0%	\$1,238,116	\$712,117	\$21,363,518	\$76,703	\$2,301,091	\$1,458,279	\$81,608	10.11%
3.5%	\$1,238,116	\$699,333	\$20,980,003	\$89,487	\$2,684,606	\$1,701,325	(\$34,085)	9.95%
4.0%	\$1,238,116	\$686,550	\$20,596,488	\$102,271	\$3,068,122	\$1,944,372	(\$149,779)	9.80%
4.5%	\$1,238,116	\$673,766	\$20,212,972	\$115,055	\$3,451,637	\$2,187,418	(\$265,472)	9.64%
5.0%	\$1,238,116	\$660,982	\$19,829,457	\$127,838	\$3,835,152	\$2,430,465	(\$381,166)	9.48%
5.5%	\$1,238,116	\$648,198	\$19,445,942	\$140,622	\$4,218,667	\$2,673,511	(\$496,860)	9.33%
6.0%	\$1,238,116	\$635,414	\$19,062,427	\$153,406	\$4,602,182	\$2,916,558	(\$612,553)	9.17%
7.0%	\$1,238,116	\$609,847	\$18,295,396	\$178,974	\$5,369,213	\$3,402,651	(\$843,940)	8.85%

#### 2.5.9 Financial Feasibility Evaluation Sensitivity Analysis

To varying degrees, the key assumptions and estimated capital costs developed in this study directly influence the financial feasibility of the proposed MCMRA concession opportunity. To determine the degree to which the key assumptions and costs influence the financial feasibility of the proposed concession a *partial sensitivity analysis* is conducted. In the partial sensitivity analysis, the marginal impact of a key assumption is determined by allowing it to vary within a reasonable range from the base case assumption while holding all other assumptions constant under various franchise fee levels.

Tables 2.5.9-1 through 2.5.9-4 display the results of the partial sensitivity analysis. In each table, the franchise fee variable is located in the second column and allowed to vary between 1.0 and 3.5 percent and the key assumption begin evaluated is placed in the third row. The IRR resulting from varying the key

assumption at various franchise fee levels is located at the intersection of the franchise fee row and the key assumption variable column. Table 2.5.9-5 shows how the financial metrics change when the total required initial capital investment estimates are altered.

Table 2.5.9-1. IRR Matrix: Franchise Fee & Annual Visitation Growth<sup>1</sup>

	Annual Visitation Growth									
d)		0%	0.5%	0.9%	1.5%	2.0%				
Fee	1.0%	10.13%	10.46%	10.73%	11.06%	11.30%				
	1.5%	9.97%	10.31%	10.57%	10.91%	11.14%				
Pisi Pisi	2.0%	9.82%	10.15%	10.42%	10.75%	10.99%				
ျ	2.5%	9.67%	10.00%	10.27%	10.60%	10.83%				
Franchise	3.0%	9.51%	9.84%	10.11%	10.44%	10.67%				
-	3.5%	9.36%	9.69%	9.95%	10.28%	10.51%				

<sup>&</sup>lt;sup>1</sup>Bold emphasis added to indicate baseline conditions.

Table 2.5.9-2. IRR Matrix: Franchise Fee & Total Liquidation Value at the End of the Contract Term<sup>1</sup>

	Total Liquidation Value (% of Original Investment)									
		0%	27.9%	50.0%	75.0%	100.0%				
Fee	1.0%	10.57%	10.73%	10.85%	10.98%	11.10%				
ise	1.5%	10.41%	10.57%	10.70%	10.83%	10.96%				
his	2.0%	10.25%	10.42%	10.55%	10.68%	10.81%				
nchi	2.5%	10.09%	10.27%	10.40%	10.54%	10.67%				
Fra	3.0%	9.93%	10.11%	10.24%	10.39%	10.53%				
ш	3.5%	9.77%	9.95%	10.09%	10.24%	10.38%				

<sup>&</sup>lt;sup>1</sup>Bold emphasis added to indicate baseline conditions.

Table 2.5.9-3. IRR Matrix: Franchise Fee & Restaurant Occupancy Rate<sup>1</sup>

	able ziele et ikk matrix i fanemee i ee a koetaarant eesapaney kate									
	Restaurant Occupancy Rate									
4		20%	30.0%	35.0%	45.0%	75.0%				
Fee	1.0%	10.57%	10.68%	10.73%	10.83%	11.15%				
	1.5%	10.42%	10.52%	10.57%	10.67%	10.98%				
nchise	2.0%	10.27%	10.37%	10.42%	10.51%	10.80%				
2	2.5%	10.12%	10.22%	10.27%	10.35%	10.63%				
Fra	3.0%	9.97%	10.07%	10.11%	10.19%	10.46%				
ш	3.5%	9.82%	9.91%	9.95%	10.03%	10.29%				

<sup>&</sup>lt;sup>1</sup>Bold emphasis added to indicate baseline conditions.

Table 2.5.9-4. IRR Matrix: Franchise Fee & Boat Rental Occupancy Rate<sup>1</sup>

	Avg Annual Rental Per Watercraft									
4		90	100	114	120	130				
Fee	1.0%	9.94%	10.24%	10.73%	11.00%	11.47%				
_ _ 0	1.5%	9.79%	10.09%	10.57%	10.85%	11.31%				
chise	2.0%	9.64%	9.93%	10.42%	10.69%	11.15%				
ျ	2.5%	9.49%	9.78%	10.27%	10.53%	10.99%				
Fran	3.0%	9.34%	9.63%	10.11%	10.37%	10.83%				
-	3.5%	9.19%	9.48%	9.95%	10.22%	10.67%				

Bold emphasis added to indicate baseline conditions.

Table 2.5.9-5. IRR Matrix: Franchise Fee & Initial Capital Investment Costs<sup>1</sup>

	Initial Capital Investment									
4		\$7,900,000	\$8,100,000	\$8,311,339	\$8,500,000	\$8,700,000				
Fee	1.0%	11.34%	11.03%	10.73%	10.47%	10.20%				
	1.5%	11.18%	10.88%	10.57%	10.32%	10.05%				
anchise	2.0%	11.02%	10.72%	10.42%	10.16%	9.90%				
nc	2.5%	10.85%	10.56%	10.27%	10.01%	9.75%				
Fra	3.0%	10.69%	10.40%	10.11%	9.86%	9.60%				
	3.5%	10.53%	10.24%	9.95%	9.71%	9.45%				

<sup>&</sup>lt;sup>1</sup>Bold emphasis added to indicate baseline conditions.

## **Appendix A: Initial Capital Investment Estimates**

Markley Cove Required and Authorized Improvements

MC Required and Authorized Improvements and Initial Costs

Locality Adj 1.12

#### Required

Restaurant						
Description	Size	Unit	Unit Cost	Ex	tended Cost	
Building, Economy Wood Siding	1000	SQ FT	\$ 225.00	\$	252,000.00	
Site Work and Utilities	1	LS	\$ 40,000.00	\$	40,000.00	
Total \$ 292,000.0						

Parking Lot					
Description	Size	Unit	Unit Cost	Ext	tended Cost
6 inch Gravel, 3 inch Bituminous	50	VEH	\$ 1,245.00	\$ \$	69,720.00
Total				\$	69,720.00

Park Model/Cabin	QTY	2			
Description	Size	Unit	Unit Cost	Ex	tended Cost
Building, Economy Wood Siding	400	SQ FT	\$ 145.00	\$	64,960.00
Site Work and Utilities	1	LS	\$ 15,000.00	\$	15,000.00
Tota	al			\$	79,960.00

Day Use Sites		QTY	5			
Description		Size	Unit	Unit Cost	Ext	ended Cost
Grading		1	SITE	\$ 1,300.00	\$	1,456.00
Table and Grill*		1	SET	\$ 1,400.00	\$	1,400.00
Parking Space, Gravel		1	VEH	\$ 850.00	\$	952.00
	Total				\$	3,808.00

Fish Cleaning Station						
Description	Size	Unit	U	nit Cost	Ext	tended Cost
Metal Roof Building, Post Barn	200	SQ FT	\$	95.00	\$	21,280.00
Site Work and Utilities	1	LS	\$ 1	5,000.00	\$	15,000.00
Total	ı				\$	36,280.00

Remove and Grade Retaining V	Valls QTY	20			
Description	Size	Unit	Unit Cost	Ext	tended Cost
Demolition	240	L FT	\$ 36.00	\$	9,676.80
Grading	1	SITE	\$ 1,300.00	\$	1,456.00
BMP Installation	1	SITE	\$ 200.00	\$	200.00
т	otal			\$	11,332.80

#### References:

- Napa Locality Adj (1.12), 2015 RS Means Sq Ft and Site Work Costs
- 2. \*Picnictable.com & Kay Park Recreation.
- 3. Opinion of probable Costs Lake Berryessa, Lake Berryessa Concession Infrastructure Design, Draft Infrastructure Basis of Design ReportAppendix D Opinion of Probable Cost Estimates, July 2015

Assumes all Improvements are completed in years 1-3.

Grind and Repave Roads (Gravel)						
Description	Size	Unit	Unit	Cost	Ex	tended Cost
Demolition of pavement areas	22230	SQ YD	\$	5.80	\$	144,406.08
Grading	32300	SQ YD	\$	0.54	\$	19,535.04
Gravel Surface, 3 Inch	32300	SQ YD	\$	3.96	\$	143,256.96
Tota	I				\$	307,198.08

Boat Rental Start up					
Description	Size	Unit	Unit Cost	Ex	tended Cost
Fishing Boats (Non-motorized)	2	EACH	\$ 1,500.00	\$	3,000.00
Personal Water Craft	15	EACH	\$ 13,000.00	\$	195,000.00
Ski Boats	5	EACH	\$ 57,000.00	\$	285,000.00
Total				\$	483,000.00

Total Site Work C&I Cost	\$ 1,593,814.08
Planning, Environmental and Engineering (15%) NI Boats	\$ 166,622.11
Total Required C&I Cost	\$ 1,760,436.19

#### Authorized but proposed as Required

Park Model/Cabin	QTY	5			
Description	Size	Unit	Unit Cost	Ex	tended Cost
Building, Economy Wood Siding	400	SQ FT	\$ 145.00	\$	64,960.00
Site Work and Utilities	1	LS	\$ 15,000.00	\$	15,000.00
Tota	al			\$	79,960.00

Day Use Sites		QTY	5			
Description		Size	Unit	Unit Cost	Ex	tended Cost
Grading		1	SITE	\$ 1,300.00	\$	1,456.00
Table and Grill*		1	SET	\$ 1,400.00	\$	1,400.00
Parking Space, Gravel		1	VEH	\$ 850.00	\$	952.00
	Total				\$	3,808.00

Boat Rental Start up					
Description	Size	Unit	Unit Cost	Ex	tended Cost
Fishing Boats (Non-motorized)	20	EACH	\$ 1,500.00	\$	33,600.00
		EACH		\$	-
Total				\$	33,600.00

Additional Slips						
Description		Size	Unit	Unit Cost	Ex	tended Cost
Slips		48	EACH	\$ 14,000.00	\$	752,640.00
Gangway, 100'x10'		1000	SQ FT	\$ 92.40	\$	92,400.00
	Total				\$	845,040.00

Total Authorized Site Work C&I Cost	\$ 1,297,480.00
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