

# Oroville Whitewater Project Feasibility Study



SIERRA OUTDOOR CENTER



## Plei

Jeffrey T. Wise, Principle

Stephen Youngblade- Associate

417 Westbury Rd. Charlotte NC 28211

704-351-0667

# Executive Summary

The City of Oroville, California is considering the development of a "whitewater park" located in or near the city. The initial driver of the whitewater park concept was the opportunity to utilize the Feather River, which flows through the city, as a means of creating a recreation attraction. Just as there are numerous varieties and types of "whitewater parks", over the approximately 10 years since the inception of the idea within the city, there have been numerous concepts and objectives driving the project.

The goal of this report is to simply provide a basis for determining whether a "whitewater park" can be successful. Specifically, this report is intended to help answer what is the purpose of the project and can that purpose be achieved.

After careful consideration with the various stakeholders, the following are the primary goals and objectives identified for the project:

- Economic Development Driver
- Quality of Life Enhancement
- Brand Builder for the Community
- Tourism Draw
- Operationally Self Sustaining

Given the wide range of options for what is considered a "whitewater park", for purposes of this analysis, the following 3 types of "whitewater park" have been considered:

- A. In-Channel Modification-** This model consists of either diverting water from the existing channel of the Feather River riverbed or modifying the existing channel to create or enhance the flow in order to create a whitewater effect. The model also assumes that this option would not include any recirculating of the water or boaters and there would be limited to no other programming (i.e. other outdoor recreational elements such as zip lines, climbing etc.). The most notable example for the region is located in Reno NV.
- B. Single Channel Recirculating-** This model offers a recirculating, stand-alone whitewater course that is entirely man-made. It would not be tied to the river in a physical sense in that the water is entirely self-contained in the manmade structures. This model assumes a lower pond holds the water that is pumped some 15-23 feet in elevation up to a top pond where the water then is gravity fed into a single channel leading back to the lower pond. The water and the boats therefore recirculate. This model also assumes limited additional programming. The most applicable example would be ASCI in Garrett County MD.
- C. Outdoor Recreation Center-** This model assumes a multi-channel recirculating course is merely a part of a much larger outdoor recreation playground. The whitewater is merely a significant feature at a much larger facility offering a multitude of various outdoor sports such as climbing, mountain biking, flat-water paddling, zip-lining, etc. Operations are based on a "day visit" style of operation such as that associated with ski resorts. The US National Whitewater Center in Charlotte, NC is an example of this model.

Each of the above models has been analyzed in terms of their ability to achieve the goals and objectives identified above. Based on this analysis, it is extremely unlikely that models A and B will be successful in accomplishing these goals and objectives. Model C is the option that offers the greatest likelihood of success but there are a number of challenges associated with achieving success with this model.

In order for Model C to succeed there are 5 primary challenges that must be successfully addressed:

- 1) **Market Size and Draw-** There is insufficient population located in the immediate Oroville surroundings to allow the project to operate on a self-sustaining basis. It will be incumbent upon the operators and the community at large to draw visitors from approximately 3 hours' drive.

- 2) **Outdoor Lifestyle Brand-** It is critical to the success of the project to sustain a relentless devotion to creating and maintaining an authentic outdoor lifestyle experience. The commitment to creating and projecting this brand must be the single greatest focus for the entire team and project.
- 3) **Marketing Budget-** In order to draw the visitors as far as 3 hours from Oroville, the marketing resources will need to be significant. The operation can only contribute a percentage of the necessary budget. Other resources will need to be garnered in an effort to combine marketing resources in a comprehensive marketing effort.
- 4) **Development Budget-** In order to create an “attraction” that will draw from the larger population areas such as Sacramento and San Francisco MSA’s, the project will need to provide multiple elements that create a very compelling “outdoor experience”. This will require a well-developed facility that only provides for phased development after the critical mass of activities are offered at the initial development phase. This will require a substantial initial capital investment.
- 5) **Real Estate** The location for this project will be a primary driver for the ultimate success. A successful location will be defined by both appropriate infrastructure and access for operations but also allowing sufficient acreage to create a compelling outdoor experience. The location must support an experience that allows the visitors to feel that they have escaped the urban environment and are connected with the natural environment.

There are a host of other risk factors not identified here that will affect the project’s likelihood for success. All parties must recognize that the risks associated with development of the project are significant and will be difficult to quantify and identify.

It is Plei’s conclusion that of the three options considered, Option C is the only model that offers a path to success. It needs to be stressed that pursuing this option is very risky and all parties should only move forward fully aware that significant risks would also apply to Option C as well. Pursuing Option C will require a commitment of significant resources to address the risk factors identified above as well as the numerous other risks involved in this high-risk endeavor. Plei’s recommendation would be to only pursue the next steps of project evaluation at a greater level of detail only if the City of Oroville is willing to ultimately commit the significant resources required for success. Stated in the most simple of terms, if the City is not ready to “go big”, it is Plei’s recommendation that a whitewater project should not be pursued.

## Background

### Scope of Assignment

---

Plei is a consulting firm engaged by the City of Oroville to conduct a feasibility study of the Oroville Whitewater Project. The purpose is to determine if the project makes sense to develop. In other words can the project be successful? Accordingly, two questions will be answered in this report:

1. What are the goals and objectives of the project?
2. Can those goals and objective be met?

The answer to those two questions will ultimately establish the business model that should in turn drive the nature and design of the Oroville Whitewater Project. Establishing a very basic business model is critical in order to make sure that everyone is on the same page as to the definition, scope, and purpose for the project.

Plei is focused on providing an analysis that simply addresses the feasibility of the whitewater project strictly in business terms. In other words, Plei has been asked to opine as to whether a whitewater park is financially viable in a conceptual sense independent of the potential site of the project.

---

## About Plei

---

Plei is a development and operations consulting firm comprised of the individuals responsible for conceiving, designing, developing and operating the US National Whitewater Center (USNWC). The USNWC is an outdoor adventure and environmental education center located in Charlotte, N.C. The USNWC is situated on over 400 acres of woodlands and features the world's largest, man-made whitewater river. It is an Official U.S. Olympic Training Center that offers whitewater rafting and kayaking, flat-water kayaking, mountain biking, rock climbing, aerial adventure courses, zip lines, a canopy tour, team building and rope courses. There are also restaurants, an outdoor outfitter and conference center. The Center also hosts numerous festivals and conducts live music.

The USNWC had gross revenues of approximately \$13 million dollars in 2011 and a net ordinary profit of almost \$2 million. Over 520,000 people visited the Center in 2011. The Center employs over 1000 people each year and is the 7th largest tourist attraction in the state.

Jeff Wise and Stephen Youngblade have acted as the principle assignment consultants on the project. Wise is the Executive Director and the original creator of the USNWC. Stephen Youngblade handles all market research and analysis for the USNWC.

---

## Data and Materials

---

Wise and Youngblade both visited Oroville for 4 days in April of 2012 and compiled the following research in advance and during the visit:

- City Staff provided demographic research from Buxton Research for the 3 hour driving radius from Oroville
- Staff also provided a plethora of reports and studies conducted over the last ten years by various governmental agencies regarding the research and analysis for the whitewater project (e.g. Feather River Whitewater Study Plan, DWR Whitewater Study)
- Conducted meetings with various City staff including: Harold Duffey-City Administrator; Sam Driggers- Economic Development Manager; Don Rust- Director of Planning and Development; Tom Fitzpatrick- Project Specialist, Bob Marciniak- Project Specialist.
- Met with City Councilperson Pittman as well as Mayor Dahlmeier, Vice Mayor Wilcox and other councilpersons during public input meetings.
- Conducted 3 public input and information gathering sessions attended by members of various constituencies with a primary focus on covering the goals and objectives of the whitewater project
- Surveyed the general area around the City of Oroville by single engine airplane, car, mountain bike, and on foot.
- Met with Jody Gallaway representing Gallaway Enterprises and McLaughlin Whitewater
- Attended meetings with David Steindorf with American Whitewater
- Presented preliminary findings to the Oroville City Council.

---

## Scoping- Defining the Project

---

### Goals and Objectives

---

In order to determine the viability of the "Oroville Whitewater Project" the first step is to determine the goals and objectives for the project. In other words why create a whitewater park? If all of the parties are not clear as to why, then the what, where and how cannot be determined or evaluated. This scoping process is designed to provide the parties with a clear objective for the project so that all of the next steps can be pursued.

The City of Oroville has been considering the creation of a “Whitewater Park” for at least 10 years. Oroville’s connection to the Feather River geographically and historically has led many to believe that such a park would be logical. There appears to be a general excitement among various constituencies but there appears to be a lack of a firm understanding or consensus of what the park is and what purpose it serves. There has been a series of public input opportunities over the last ten years but there has not been a defined set of objectives to which all of the parties have subscribed.

Based on the research prior to and during the four day visit to Oroville where a series of public meetings were conducted, Plei has identified the following 5 goals and objectives for the project:

- Economic Development Driver
- Quality of Life Enhancement
- Brand Builder for the Community
- Tourism Draw
- Operationally Self Sustaining

---

## Whitewater Project Description

---

In order to achieve the project goals and objectives identified above, the scope of the Oroville Whitewater Project will need to be significant. Significant in this case is defined as a creating a compelling destination that will draw visitors from a 2-3 hours’ driving distance to enjoy a 1-3 day visit. In order to accomplish this effort, the Oroville Whitewater Project will need to have the following characteristics:

- A broad and appealing set of outdoor activities to offer the visitors will be essential. This should include at least 5-6 different sports and multiple offerings within each of the sports. Particularly as this relates to the whitewater itself, do not simply build a short, in-stream modification or one recirculating channel. No one is going to drive for 3 hours and settle on a limited whitewater experience.
- The activities must be authentic outdoor experiences. In other words, the goal is to make sure that the destination is truly an “Outdoor Center” and does not drift into an amusement facility or try to become all things to all people. Stay true to the brand or value proposition that declares that the Oroville Whitewater Project will offer you a first class outdoor experience.
- A compelling location for the Oroville Whitewater Project is critical. In order to support the brand of an authentic outdoor experience, the location must offer large amounts of open space that disconnect the visitor from the urban environment. This disconnection is critical because that is a key element the visitor seeks and is critical to their overall experience. Even though the project can be located just a few minutes from the urban environment, the visitor needs to feel that connection to the outdoors by immersing themselves in a more natural environment. Focus on a site that creates the look and feel of all that is special about the outdoors. Connect with water, trees, other plant life, elevation and the opportunity to experience wildlife. In other words be as close to the outdoors and the natural environment as possible.
- Offer creature comforts and relaxation elements. As much as the natural environment is critical, the visitor still needs to know that they have all of the comforts of home at their fingertips. They want to play outside but they want to get warm and dry and relax immediately afterwards. Food and beverage options are important as well as the right environment in which to enjoy them. They need to have a place to keep their belongings or equipment; they need bathrooms and locker-rooms. They need the ability to acquire what they forgot or perceive they need for their day through a pro-shop or retail operation. Shade, seating as well as a place to get out of any weather condition is also critical.
- Special events will be a major opportunity to bring activity to the facility that will promote the brand and the economic impact for the community. Hosting races, competitions, concerts and other forms of entertainment will be significant revenue opportunities that will also serve as a significant means of exposing the facility to a

broader market. It will be essential to factor in the infrastructure to accommodate these events (e.g. stage/amphitheater, power, lighting, vehicular access, etc.).

- There will be a significant opportunity to attract groups seeking meeting space and other amenities to handle their group needs. The project will need to include facilities that offer both indoor and outdoor meeting space providing a variety of levels of experience (formal to informal). The more the space can integrate with the natural setting the better. The need to locate group meetings as close to the water as possible cannot be adequately stressed.
- There will need to be a great deal of consideration to providing appropriate infrastructure to support the operations. For example the maintenance and upkeep of the facilities will require warehousing and maintenance facilities. Rafting will require storage and repair facilities. These demands are obvious but the degree is not and the design and programming must support and be supported by the operational infrastructure. This infrastructure must be seamless with the day to day operation whereby the guest experience is not compromised by the back of house operations.

Based on the above stated characteristics, any decision to move forward with the Oroville Whitewater Project must be guided with the understanding that the project will be a significant undertaking. The development costs including the land and improvements will require significant investments. Regulatory issues will also create considerable challenges in respect to achieving the goals and objectives as well as an impact to the project budget and schedule. It is obvious but worth stressing that coordination and support from the various governmental jurisdictions will be critical in order to develop and operate the project.

The scoping process will be incremental and will allow the decision makers to move forward in a methodical manner whereby the accuracy of the information will be greatly increased as the detail is increased. It is critical that all decision-makers understand that decision points will be reached where the goal is to develop more detailed analysis before moving forward to the next development stage. All of the following analysis is designed to simply aid the process of determining whether to continue to consider the development of the Oroville Whitewater Project.

---

## Preliminary Development Budget

---

Any estimate of the development costs for the project at this point are preliminary since there is no defined scope or design. The goal of this section of the report is to identify key development components and a possible cost for the elements. The degree of accuracy of the estimates is limited but the estimates should be used to provide an understanding of the degree of investment required.

The following budget provides a very high level cost estimate for the total buildout for the proposed project. Again, it must be stressed that this is simply a tool for evaluating the potential scope of the project. The estimates are based on a full buildout of the facilities. There are no estimates for land cost or infrastructure to access the property (e.g. roads, utilities etc.).



<b>Sierra Outdoor Center- Development Budget</b>	
<b>CONSTRUCTION COSTS</b>	<b>\$ 47,179,400</b>
Construction Fees	\$ 5,969,400
Channel System & Pump Structure	\$ 12,073,000
Outdoor Center- Restaurant, Retail, Conference	\$ 4,385,000
Climbing/HA Elements	\$ 4,385,000
Whitewater Boat House	\$ 442,000
Kayak Boat House	\$ 257,000
Land Sport Center	\$ 656,000
Boater Orientation Bldgs.	\$ 350,000
Site Maintenance & Transp Mgmt.	\$ 400,000
Adventure Pavilion	\$ 2,670,000
Gondola	\$ 1,250,000
Site work	\$ 13,500,000
Admin Building	\$ 842,000
<b>DEVELOPMENT COSTS</b>	<b>\$ 9,865,000</b>
Architecture and Engineering	\$ 6,010,000
Materials Testing and Inspection	\$ 300,000
Financing & Legal	\$ 110,000
FF&E	\$ 2,870,000
Telecom & Network	\$ 315,000
Signage & Graphics	\$ 260,000
<b>CONTINGENCY</b>	<b>\$ 2,358,970</b>
Contingency (5%)	\$ 2,358,970
<b>Total Construction Cost</b>	<b>\$ 47,179,400</b>
<b>Total Development Cost</b>	<b>\$ 9,865,000</b>
<b>Project Contingency Cost</b>	<b>\$ 2,358,970</b>
<b>Total Project Cost</b>	<b>\$ 59,403,370</b>

Sourcing the development capital for the project will require a significant effort and is not addressed in this report. In addition to the considerable financial investment for the development budget, additional items will also need to be considered such as land cost, infrastructure improvements and working capital. Accordingly, the development costs are a significant risk factor associated with undertaking this project and warrant a separate analysis in terms of sources.

## Market Analysis

### Target Market

In addition to creating a compelling destination, the other half of the success equation for the project is the marketing of the facility. It is imperative that the facility offers a strong reason to visit and communicate that message in a compelling and effective manner to the right market. This section of the report addresses the target market. The target market directs both the medium and messaging of the marketing efforts, as all communication must be strategically crafted to resonate with that market.

To start the process of that compelling message, the project will need to immediately convey a simple yet powerful statement as to the nature of the "brand". For example, Plei would recommend a name such as Sierra Outdoor Center. The goal for the name is to immediately convey a brand that would draw to mind:

- The Outdoors
- Significance
- Breadth

**Sierra Outdoor Center** helps to place the visitor immediately in the context of the brand. The name, look, and feel should all work together to make the reader feel a sense of excitement.

## Who is the Customer

Next who is the consumer for this brand? In other words, who will be the primary focus of the message? In this case, the **Sierra Outdoor Center's** target market is defined broadly as *anyone who likes to play outside*. With such a broad definition of the target market, it is important to drill down, and examine both:

- Who is the Sierra Outdoor Center's Target Market?
- Where will the Sierra Outdoor Center's Target Market come from?

The brand that is represented by the **Sierra Outdoor Center** is the exact same brand the US National Whitewater Center in Charlotte, NC (USNWC) has developed. Accordingly, the assumption is made that the target market of the **Sierra Outdoor Center** will look very similar to the USNWC target market. It is also assumed that the market will have to come from a further distance, though not outside what the USNWC has attracted to its facility.

The following is a brief analysis of the USNWC customer arrived at by an analysis of data gathered from USNWC Assumption of Risk Waivers. Every guest who participates in a pass activity at the USNWC must complete this waiver prior to his or her participation in an activity.

The USNWC tracked the address of its customers from this waiver, and used Census Data, Geographic Research, Inc. data, MRI's consumer surveys and ESRI Customer Geo-demographic Profiles to turn it into usable marketing data. Addresses were tracked to a Census Tract, Address Point or ZIP code level. The USNWC then segmented its customers into the following ESRI Customer Profiles:

Segmentation Profiles	Median HH Income	Description
Boomburbs	\$123,091	Families living a busy upscale lifestyle.
Up and Coming Families	\$77,444	Young families at the beginning of their career life cycle.
In Style	\$72,112	Professional couples, families and households without children. Enjoying staying fit and eating healthy.
Enterprising Professionals	\$69,960	Single and/or married without kids. Mobile. Disposable income.
Exurbanites	\$88,195	Empty nesters and families with children. Well employed and educated.



These profiles can be understood as psychographic and demographic types that are most likely to be a USNWC customer. For each segmentation profile, the USNWC further defined those profiles into core segments that can be specifically targeted.

Segmentation Profiles	Core Segments
Boomburbs	Women/Mom Young Professionals Empty Nesters Active Individuals
Up and Coming Families	
In Style	
Enterprising Professionals	
Exurbanites	

The USNWC ranks Women/Mom as the most important segment, as they are the influencer of family and social units. Also, these segments tend to have a high average household income and are typically well educated. Active Individuals, while important to the brand and operation of an outdoor adventure destination, should not be the focus of the marketing message. The USNWC has found that the Active Individuals will discover the facility without significant marketing resources and that

their market size and influence are relatively smaller than the other core segments.

Based on analysis of the USNWC waiver data, about 60% of USNWC customers come from ZIP codes within the Charlotte MSA, roughly a 60-minute drive from the USNWC. And roughly 80% of the USNWC customers come from within a 180-minute drive.

Top 10 ZIP Codes	Data Points
Average HH Income	\$63,000
Population	390,000

The 10 most common ZIP codes that frequent the USNWC; all of which are within the Charlotte MSA represent roughly 21% of USNWC customers. The chart above reveals the market size and average household income.

Buxton Research has provided the following data, which outlines the Population, Average HH Income and Education above High School within a 3-hour drive of Charlotte.

Demographics - Charlotte, NC	60 Minute Drive	180 Minute Drive
Population	2,361,636	10,854,571
Some Post High School (Some College - Graduate Degree)	57.7%	53.1%
Average HH Income	\$70,727	\$62,190
Income \$ 75,000 - \$99,999	12.9%	11.4%
Income \$100,000 - \$124,999	7.9%	6.5%

## Where is the Customer

The next analysis examines where the USNWC market is located (where that market comes from). Using the same address data collected from guest waivers, the vast majority of the USNWC customers come from within the Carolinas with roughly 80% of the USNWC customers coming from North and South Carolina. USNWC visitor-ship is even more localized when one reviews the Charlotte MSA, with roughly 60% of the pass traffic coming from that region.

The table below shows the exact percentage breakdown of USNWC customer geography in 2010 and 2011.

Regional MSA	Visits in 2011	Visits in 2010
Charlotte, Gastonia, Rock Hill	57.70%	58.00%
Greensboro, Winston, High Point	5.90%	4.00%
Raleigh, Durham, Chapel Hill	4.00%	3.20%
Greenville, Spartanburg,	3.40%	1.90%
Columbia	1.60%	1.10%
Carolinas (North and South)	77.80%	72.20%

The USNWC is located within the Charlotte Rock Hill, Gastonia MSA -- a major metropolitan area with a population of roughly 1,745,000. Within that MSA, the USNWC is located roughly 15 minutes away from downtown Charlotte, which has a population of 730,000.

Based on the above analysis the "sweet spot" for the USNWC target market is:

- **Who**-Women/Mom, Young Professionals, Empty Nesters, Active Individuals that skew slightly higher than average in terms of household income.
- **Where**-From the Charlotte MSA and the major urban areas within the Carolinas. Approximately 78% of all visitors were located within a 3 hour drive of the USNWC

## Definition and Location of the Sierra Outdoor Center Target Market

It is assumed that the target market of the Sierra Outdoor Center will look very similar to the USNWC target market based on the overlay of the brands. Through an analysis of the population of the region surrounding the City of Oroville, it is concluded that the Sierra Outdoor Center will have to pull its target market from a larger geographic footprint, though not outside what the USNWC has attracted to its facility. While the majority of the USNWC customers come from within a 60-minute drive, the opposite will be true for the Sierra Outdoor Center. It will have to pull a majority of its customers from outside 60 minutes, but within 180 minutes' drive.

Thus, Plei suggests that the market for the Sierra Outdoor Center will look similar to that of the USNWC and that the location of that market will be almost completely reversed from that of the USNWC. One can use the same 60-minute and 180-minute drive time data provided by Buxton Research to highlight this point:

2010 Demographics - Oroville, CA	60 Minute Drive	180 Minute Drive
Population	407,305	7,912,874
Some Post High School Education	56.80%	62.50%
Average Household Income	\$60,199	\$84,659
Income \$ 75,000 - \$99,999	11.40%	13.20%
Income \$100,000 - \$124,999	6.30%	9.30%

The population count and Average Household Income within the 60-minute radius of Oroville is significantly lower than that of what Charlotte experiences. However, while slightly less populous, the 180-minute drive radius outside of Oroville’s income and education metrics looks very similar to that of Charlotte. Oroville is not located within a major metro area like Charlotte; however, the demographics of the region within a 180-minute drive time are very similar to that of Charlotte NC.

This presents a significant challenge to the City of Oroville should it choose to develop the **Sierra Outdoor Center**. The USNWC historically has only drawn roughly 20% of its guests from outside the Charlotte MSA, but still within the 180-minute drive radius. The region within a 60-mile drive of the City of Oroville is simply not populous enough to contain enough of the target market of the **Sierra Outdoor Center**.

Furthermore, the USNWC draws roughly 20% of its guests from 10 ZIP codes within the Charlotte MSA. The population and income breakdown of those ZIP codes looks very similar to that of the 60-minute radius of Oroville. Plei suggests that the City of Oroville should not expect to draw more than 20% of their customers from within that 60-minute radius. In order to successfully meet the goals and objectives of the City of Oroville, the Sierra Outdoor Center will have to draw from a 180-mile drive footprint.

Based on the assumptions provided above and the number of visitors to the **Sierra Outdoor Center** as estimated in the operational pro-forma, the breakdown appears as follows:

Geographical Distribution – Paying Guest Count				
Location	Total	MSA	60 min radius	180 min radius
Sierra Outdoor Center	100,689	20,138	60,413	20,138
US National Whitewater Center	168,173	97,036	33,803	37,334

There are significant gains to be had by the City of Oroville of an understanding of the USNWC target market. This assumption is based upon the philosophy that potential consumers of the **Sierra Outdoor Center** will behave similarly to the consumers of the USNWC in North Carolina. Plei strongly urges the City of Oroville to think broadly in defining their market. Authentic outdoor activities are ubiquitous in their appeal, and by keeping the market definition broad, the City of Oroville does not risk alienating potential customers by failing to target them from the start.

As important as a broad approach to the target market, is an understanding of where that market exists. The City of Oroville is at a significant disadvantage in terms of not having a large, metro area located close to the proposed locations

for the Sierra Outdoor Center as the USNWC has with the City of Charlotte. In order for the City of Oroville to be successful in achieving their goals and objectives, the facility will need to pull from a larger geographic area than exists in its immediate surroundings. The scope of the marketing message must be large in definition and geography, as the majority of the customers of this facility will have to come from outside a 60-mile drive, but within a 180-mile drive.

## Preliminary Site Analysis

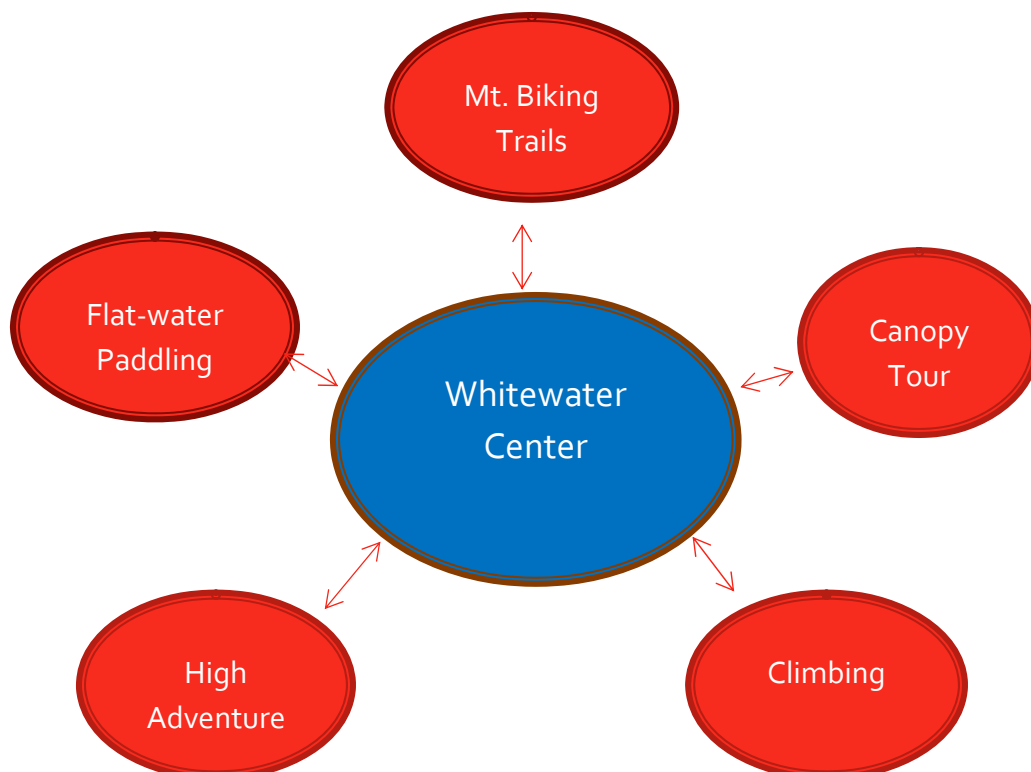
As a part of this feasibility analysis, Plei has visited Oroville and reviewed the general area surrounding the city. The review was conducted in an effort to offer recommendations and insight regarding the potential location for the Oroville Whitewater Project. The scope of this report does not allow for a thorough analysis of the potential site(s). Instead the report will simply address the general site requirements and preliminary opinions regarding the Oroville location options.

Plei's opinions regarding the feasibility of the project are not based on any particular site. The opinions are based on the assumption that elements described below can be met on whichever site(s) are eventually selected.

The following is a high level listing of the site requirements as initially identified by Plei and factored in as requirements for the success of the project:

**Size:** Minimum of 100 acres. While 100 acres is the recommended minimum, it is highly recommended that the site offer at least 250 acres of open space in order to create an outdoor/non developed feel. Anything greater than 250 acres would be preferable given the large number of programming and amenities required for the project, in addition to the natural outdoors feel needed for the project to succeed. Given the considerable natural beauty of the area surrounding Oroville it would be wise to take advantage of this natural asset. If the project requires, creating a hub and spoke arrangement for the elements and amenities is an option. For example, the main elements such as the whitewater channels and supporting amenities could be the hub or headquarters and the other elements located in other adjacent areas could be connected in a thematic or physical manner (open space corridors, the Feather River, biking trails, etc.). See below:

### Hub and Spoke Model



**Character:** Preferably any site selected would place a great deal of emphasis on site character. As stated in numerous other portions of this report it is critical that the site support the brand. In the selection of a site, one must be very aware of the need to incorporate as much of the natural environment as possible. Natural elements such as rivers, creeks, ponds, lakes, trees and open or undeveloped space is critical. Once again, the emphasis must be on creating a feeling that the visitor is not in an urban environment.

While the excitement of the activities is critical, the feel associated with those activities must be created with the help of the site itself. The activities can create excitement largely independent of the site. The same cannot be said for the character of the site. The site either has character or it does not. No budget is big enough to create the character nature can offer on its own. The artificial elements must work with the natural elements to create a compelling destination.

**Utilities:** Local code and other ordinances will dictate exact requirements but in general the facility should only require the following for operational purposes:

- Electricity running to the site should be a minimum of 6000 kva.
- Water requirements can be met with a minimum of a 6-inch main line and preferably 8 inch or greater.
- Sewer needs can be met with a minimum of a 6-inch line and 8 inch would be preferable.
- Natural gas would be another preferred option but is not necessary.

**Vehicular Access:**

The traffic count for the facility is estimated to fall largely along the following lines-

<u>Estimated Traffic (Vehicles)</u>	
Average Annual Load	265,127
Peak Daily Load	4,400
Average Daily Load (High Season Weekend)	1,800
Average Daily Load (High Season Weekday)	1,080

Accordingly, the entrance road can be 2 lane paved surface road. The parking lot should offer at least 1200 parking spaces and ideally 1500 with the ability to accommodate up to 4000 cars for special events (local off-site parking and shuttles can assist in this regard). After construction is completed, 18 wheel vehicles will need to access the site on occasion for deliveries.

The City of Oroville is fortunate to have significant options in regards to the possible site for the whitewater project. There are several areas that offer large undeveloped tracts of land that are either in public ownership or capable of being used for public purpose. Most importantly, the City of Oroville has the benefit of being surrounded by a great deal of natural beauty. Nature has provided a great start for Oroville to become an outdoor recreation hub. Investing in this natural asset is a smart way to leverage the valuable asset in hand. The areas immediately north of the city along the Feather River offer very compelling options.

# Business Model Analysis

---

## Defining the Business Model

---

The Oroville Whitewater Project absolutely must be driven by its business model. The business model will drive the operational model which in turn will dictate the design. This feasibility report is the first step in the process of creating the model. The business plan is the second step in creating the business model and its purpose is to provide a plan for success if the feasibility analysis determines the project can be successful. The question that will be answered at the end of this report is, can the Oroville Whitewater Project be successful?

As discussed in the Project Scope section of the report, the goals and objectives of the project will define success. The business model will therefore provide the structure on which to base that success. Given the wide range of options for what is considered a "whitewater park", for purposes of this analysis, the following 3 types of "Whitewater Park" have been considered:

- A. **In-stream Modification-** This model consists of either diverting water from the existing channel of the Feather River riverbed or modifying the existing channel to create or enhance the flow in order to create a whitewater effect. The model also assumes that this option would not include any recirculating of the water or boaters and there would be limited to no other programming (i.e. other outdoor recreational elements such as zip lines, climbing etc.). The most notable example for the region is located in Reno NV.
- B. **Single Channel Recirculating-** This model offers a recirculating, standalone whitewater course that is entirely manmade. It would not be tied to the river in a physical sense in that the water is entirely self-contained in the manmade structures. This model assumes a lower pond holds the water that is pumped some 15-23 feet in elevation up to a top pond where the water then is gravity fed into a single channel leading back to the lower pond. The water and the boats therefore recirculate. This model also assumes limited additional programming. In other words the whitewater is the only real attraction. The most applicable example would be ASCI in Garrett County MD
- C. **Outdoor Recreation Center-** This model assumes a multi-channel recirculating course is merely a part of a much larger outdoor recreation playground. The whitewater is merely a significant feature at a much larger facility offering a multitude of various outdoor sports such as climbing, mountain biking, flat-water paddling, zip-lining, etc. Operations are based on a "day visit" style of operation such as that associated with ski resorts. The US National Whitewater Center in Charlotte, NC is an example of this model.

---

## Evaluating the Business Models

---

The relative merits of each of the 3 models must be measured against their ability to achieve the goals and objectives. In other words, the next step is to evaluate each of the 3 model's chance to succeed.

### In-stream Modification- Model A

---

This model offers the lowest risk but also a very low return in terms of meeting the project goals and objectives. The risk minimized with this model is a relatively low capital investment and virtually no operational cost. The low return rate is measured by the minimal impact on economic development and quality of life.



Model A- In-stream Modification (Reno)	
Pros	Cons
<ul style="list-style-type: none"> <li>• Relatively low capital cost (\$1-\$3 million)</li> <li>• No real operating cost</li> <li>• Minimal real estate (small footprint)</li> <li>• Engineering and construction are not complicated</li> <li>• Would be a popular local park attraction</li> <li>• Would meet minimum definition of a whitewater park</li> </ul>	<ul style="list-style-type: none"> <li>• Does <b>not</b> noticeably drive economic development</li> <li>• Minimal effect in offering brand building for the City</li> <li>• Virtually no impact as a tourism draw</li> <li>• Very little impact on quality of life</li> <li>• Will not have any direct job creation</li> <li>• Extremely limited user base and appeals to very limited market</li> </ul>

Plei would not recommend pursuing the instream modification model based on how ineffective it would be at meeting the goals and objectives. While the costs (risks) are low the returns are minimal. Accordingly this model should only be pursued if the City is seeking to create an attractive public park element for the citizens of Oroville and a few local kayakers that would drive a few miles to “play” in the park. Remember, the kayakers are small in number and have a wide variety of options for first class whitewater in the area. Any park built for the purposes of attracting the whitewater kayaker will have minimal impact on the City’s goals and objectives.

### Single Channel Recirculating Course- Model B

This model offers fairly high risk and vitually no return. There is simply not enough programming to serve as the draw to the Sacramento and San Francisco market. In other words, this model would not get people in their cars to come and visit Oroville in numbers that would meet the goals and objectives for the project. As the proforma provided below projects, this model would probaly only draw a little over 11,000 users per year. The project would in all likelihood not be operationally sustainable and would have minimal impact on economic development and brandbuilding.

Model B- Single Channel Recirculating (ASCI)	
Pros	Cons
<ul style="list-style-type: none"> <li>• Provides recirculating whitewater to allow for rafting</li> <li>• Somewhat unique feature for the region</li> <li>• Minimal real estate (small footprint)</li> </ul>	<ul style="list-style-type: none"> <li>• Relatively high capital cost (\$18-\$25 million)</li> <li>• Would most likely not be operationally sustainable</li> <li>• Does <b>not</b> noticeably drive economic development</li> <li>• Minimal effect in offering brand building for the City</li> <li>• Minimal impact as a tourism draw</li> <li>• Very little impact on quality of life</li> </ul>

Plei would not recommend the City pursue Model B. The only other model in North America (Adventure Sport International) has not been operationally sustainable and in fact was just taken over by the local county government after it defaulted on its loans. There is little to no reason to recommend this model in terms of its ability to meet the project goals and objectives.

### Outdoor Recreation Center- Model C

Plei’s familiarity with this model is obviously greater than the other models due to the role its consultants have had in the development and operation of the US National Whitewater Center, a multi-sport outdoor recreation center. The USNWC is the best example of the model identified here and Plei recognizes the bias reflected in the familiarity with this model. The USNWC does however offer a model for success in terms of meeting the Oroville Whitewater Project’s goals and objectives.

The USNWC has achieved the goals and objectives for the Oroville Whitewater Project;

- **Economic Development-** USNWC employees over 1000 people annually and serve as a primary recruiting tool for the Charlotte Chamber of Commerce and The Charlotte Regional Visitors Authority.
- **Brand Building and Quality of Life-** Charlotte has solidified its brand as an active and vibrant community with a focus on the healthy lifestyle. Numerous national and international periodicals, television shows and media outlets have featured the Center. In addition to serving as an official U.S. Olympic Training Site, the facility has hosted Olympic Trials, concerts, races and other national and international sports competitions. The Center serves as the focal point for the region’s active lifestyle.
- **Tourism Draw-** The Center is now the 7<sup>th</sup> largest tourist attraction in the state (measured by visitor count) with over 520,000 visitors in 2011 (15% growth from 2010).
- **Financially Sustainable-** The Center generated almost \$2 million in profit last year with a 48% growth in revenue. The Center has generated an operating profit since its first year.

Based on the success of the USNWC, Plei believes that the USNWC model can potentially be successful in Oroville. The basis of this opinion is that Oroville would invest the significant capital necessary to create a draw to pull visitors from 180 miles. This investment would be greater than that invested in the USNWC because the distance and competition are greater in the Oroville area. Should Oroville develop the larger model featured here, the following pros and cons would apply:

Model C- Outdoor Recreation Center (USNWC)	
Pros	Cons
<ul style="list-style-type: none"> <li>• Would most likely have significant impact on economic development</li> <li>• Could have considerable effect in offering brand building for the City</li> <li>• Could serve as an important tourism draw</li> <li>• Substantial impact on quality of life</li> <li>• Could most likely be operationally sustainable</li> <li>• Significant direct and indirect job creation</li> </ul>	<ul style="list-style-type: none"> <li>• Relatively high capital cost (\$50-\$70 million)</li> <li>• Very high operating cost</li> <li>• Requires substantial development and operating expertise</li> <li>•</li> <li>•</li> <li>•</li> </ul>

## Proforma Comparison

Plei has developed an operational proforma to evaluate the sustainability for models B and C. The following assumptions are consistent with the results at USNWC and ACSCI on a relative basis.

	Option C		Option B	
	Outdoor Recreation Center		Single Channel Recirculating	
<b>Ordinary Income/Expense</b>				
Income				
4000 - Passes	\$	4,396,574	\$	-
4100 - Paddlesports	\$	278,015	\$	809,412
4200 - Land & Adventure	\$	113,470	\$	-
4270 - Canopy Tour	\$	260,753	\$	-
4300 - Food & Bev	\$	1,474,970	\$	592,988
4400 - Retail	\$	401,456	\$	131,956
4530 - Parking	\$	306,012	\$	-
4590 - Youth Programs	\$	177,673	\$	-
4600 - Other Operating	\$	283,581	\$	109,777
4700 - Other Non Operating	\$	5,659	\$	3,534
<b>Total Income</b>	<b>\$</b>	<b>7,698,162</b>	<b>\$</b>	<b>1,647,667</b>
Cost of Goods Sold	\$	-	\$	-
5020 - COGS - Labor	\$	1,923,570	\$	406,062
5100 - COGS - Retail	\$	218,637	\$	72,879
5300 - COGS - F&B	\$	485,890	\$	195,406
5400 - COGS - Other	\$	238,000	\$	238,000
<b>Total COGS</b>	<b>\$</b>	<b>2,866,098</b>	<b>\$</b>	<b>912,347</b>
<b>Gross Profit</b>	<b>\$</b>	<b>4,832,065</b>	<b>\$</b>	<b>735,320</b>
Expense	\$	-	\$	-
6100 - Administrative Payroll	\$	1,339,355	\$	674,971
6250 - Insurance	\$	220,623	\$	142,338
6270 - Professional Fees	\$	59,908	\$	22,653
6300 - Repairs & Maintenance	\$	581,137	\$	297,998
6390 - Utilities	\$	692,590	\$	266,095
6400 - Marketing	\$	754,881	\$	256,691
6500 - Rents and Leases	\$	127,478	\$	61,923
6700 - Supplies	\$	397,521	\$	192,496
6800 - Other Operating Expenses	\$	255,845	\$	93,850
<b>Total Expense</b>	<b>\$</b>	<b>4,429,338</b>	<b>\$</b>	<b>2,009,014</b>
<b>Net Ordinary Income</b>	<b>\$</b>	<b>402,727</b>	<b>\$</b>	<b>(1,273,693)</b>
Other Income/Expense	\$	-	\$	-
Other Income	\$	-	\$	-
4800 - VIK Revenue	\$	-	\$	-
7000 - Service Fees	\$	-	\$	-
7100 - Interest Income	\$	2,520	\$	2,520
7200 - Other Income	\$	-	\$	-
<b>Total Other Income</b>	<b>\$</b>	<b>2,520</b>	<b>\$</b>	<b>2,520</b>
Other Expense	\$	-	\$	-
6505 - VIK Land Lease	\$	-	\$	-
8100 - Depreciation Expense	\$	1,260,000	\$	1,260,000
9000 - Non-Operating Expenses	\$	-	\$	-
9100 - Interest Expense	\$	-	\$	-
<b>Total Other Expense</b>	<b>\$</b>	<b>1,260,000</b>	<b>\$</b>	<b>1,260,000</b>
<b>Net Other Income</b>	<b>\$</b>	<b>(1,257,480)</b>	<b>\$</b>	<b>(1,257,480)</b>
<b>Net Income</b>	<b>\$</b>	<b>(854,753)</b>	<b>\$</b>	<b>(2,531,173)</b>
<b>Gross Margin</b>		63%		45%

Vital Stats		
	C	B
Passes Sold per Year	100,689	11,688
Rafter per Year	69,331	11,688
Total Visits per Year	402,756	58,441

## Conclusion

The City of Oroville is faced with a set of challenging circumstances as experienced by many rural communities. How does it create a compelling place to live and visit that also offers a long-term sustainable and healthy economy? The decision to look to the Feather River as a part of this solution is both intelligent and logical. Most importantly this is consistent with the tides of time. The Feather River has been the lifeblood for the community and region for hundreds of years. Turning to the river one more time for the area's future can be a wise choice.

The City of Oroville can define itself using the Feather River. That definition can be one of the most compelling and universally appealing of all descriptions for a community, the **active outdoor lifestyle**. Playing outdoors is as universal for all humans as drinking and eating. The Feather River can serve as the focal point for that active lifestyle in the region. Add in the other natural features of the area at the foothills of the Sierra Nevada Mountain Range and nature has provided the beginnings of a natural playground that can draw thousands and engage everyone.

What nature has provided can be enhanced by the development of manmade recreational and relaxation elements such as the recirculating whitewater channels, zip lines, aerial adventure courses, restaurants and concerts. Oroville absolutely should invest in its greatest existing asset and leverage these natural resources in a sustainable and compelling manner. The recreational and natural elements can be enhanced and featured in a manner that establishes Oroville's brand as the outdoor lifestyle capital in California and the United States.

Should Oroville choose to move in this direction, it is Plei's strong reminder that Oroville do so only with the understanding that moving forward will require significant financial investment and a single-minded commitment to creating the outdoor lifestyle brand. Throughout the report, Plei has stated that the City needs to go big or do not go at all. Half steps are certain to fail and the effort should not be taken unless there is a commitment to see this to the end.

It is Plei's measured and considered opinion that the City of Oroville can achieve the goals identified in this report if the City is willing and capable of investing the significant resources to develop the outdoor recreation center identified in this report as model C. This option does have considerable risk of operating at a financial loss and it will take a considerable investment in marketing the project to give it the opportunity to succeed. It may take a few years for the project to develop the market before it can become profitable but it can eventually draw the 100,000 paying visitors that are estimated to make the project financially viable.