

## WYORCA

**WYORCA**  
"Bringing Recreation  
Closer to Home"



### Mission

The Western Yolo Recreation Center Association is dedicated to providing all adults and youth in the Western Yolo communities of Madison, Esparto, Capay, Brooks, Guinda, and Rumsey, a place to play, swim, exercise, gather, celebrate and "hang out." WYORCA is irrevocably dedicated to non-profit purposes. No part of the net income or assets of this association shall ever inure to the benefit of any private person. The purpose of WYORCA according to its by-laws is:

- \*To acquire funds to build and maintain a recreation center for the Western Yolo communities
- \*To promote recreation and athletic needs of its citizens
- \*To receive and allocate all gifts, endowments and bequests
- \*To actively pursue fund raising activities

WYORCA works with civic groups including the Hoes Down Harvest Festival, Esparto Lions Club, Capay Valley Vision Recreation Task Force, and the Capay Valley Volunteer Fire Department Auxiliary.

### Vision for this project

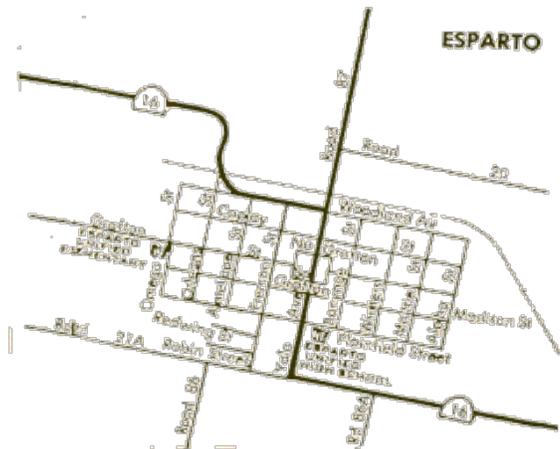
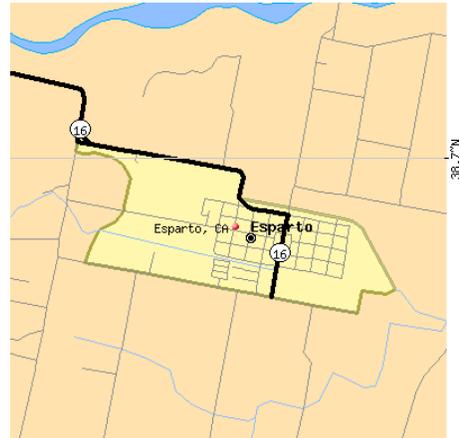
An aquatic and recreation center consisting of a community swimming pool complex and a multi-purpose center to serve the communities of Madison, Esparto, Capay, Brooks, Guinda, and Rumsey. A gathering place that would enhance the recreational and cultural opportunities of the rural Capay Valley region. A resource for long-term health benefits via swimming, exercise and other physical and mental well-being programs.



## SITE CRITERIA

A site has not yet been selected by WYORCA. The desire is to locate the center on a public site or on a donated parcel part of a new development. There are several possibilities being explored: to develop an independent center on its own site; to incorporate the center into a new community park in a new subdivision; and to develop the new center as a joint facility with the new high school planned for Esparto. As a result, the design for the Aquatic and Recreation Center is presented on a “generic” site in Esparto or nearby surrounding area.

The center has therefore been designed with various site elements that are site adaptable, but with specific orientation for optimum solar exposure. Given a specific site of a different proportion, the layout for the center could be stretched laterally east-west or vertically north-south and retain the desired orientation and relationship of the various site elements.



Map of Esparto

Vicinity Map of Esparto

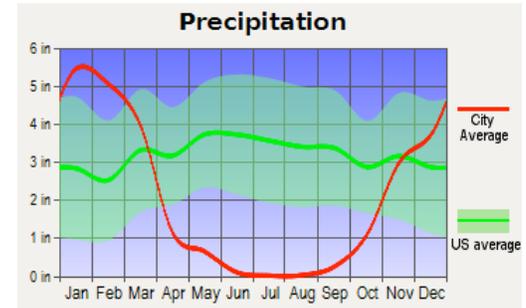
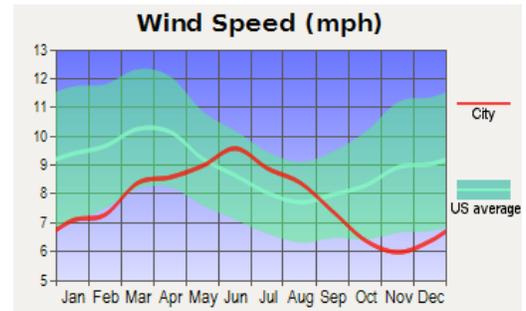
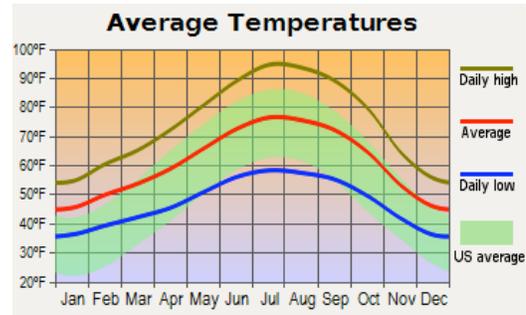
## CLIMATE ANALYSIS

### Cache Creek Basin Climatic Data

(California Department of Water Resources)

The climate of the Capay Valley (Cache Creek Basin), like most of Northern California, is characterized by cool wet winters and hot dry summers. Temperatures range from slightly below freezing in most winters to highs of more than 100 degrees Fahrenheit during the summer. Hard freezes occur relatively rarely but can damage sensitive plants and trees. Similarly, occasional heat waves occur, especially in July and August. The following data from the California Department of Water Resources show average readings for temperature and precipitation over several decades.

Month	Av Temp F	Av Precip In
Jan	44.8	4.06
Feb	48.5	4.10
Mar	52.9	2.63
Apr	58.2	1.31
May	65.3	0.60
June	72.4	0.20
July	78.4	0.01
Aug	75.8	0.02
Sep	72.1	0.19
Oct	63.4	0.96
Nov	52.6	1.75
Dec	46.0	4.17



## CASE STUDIES

### **FINLEY AQUATIC CENTER**

Santa Rosa, Ca.

#### **Facility Highlights**

- Large training pool
- “L” shaped instructional pool
- 1 foot enclosed wading pool
- Fully ADA accessible with pool ramp and wheelchair lift
- Reception and office facilities
- Locker rooms and showers
- Classroom
- Concession stand



### **FOLSOM AQUATIC CENTER**

Folsom, Ca.

#### **Facility Highlights**

- \$5.6 million
- 6.5 acres
- 50 meter competitive pool with bulkhead
- 25 yard warm water instructional pool (for therapy and instruction)
- Family activity pool with beach entry
- Interactive water-play climbing structure
- Water slide
- Shade Structures
- Family picnic area
- Concession stand
- Locker rooms and restrooms
- Family changing room



**MORGAN HILL AQUATIC CENTER**

Morgan Hill, Ca.

**Facility Highlights**

- 50 meter All-Deep competition pool
- 5,000 s.f. activity pool with Play Structure
- Water slide
- 4-lane lap pool spray ground
- Concessions
- Special Events rooms
- Group Picnic Areas



**ARROYO POOL**

Davis, Ca.

**Facility Highlights**

- Competition lap pool
- Family activity pool w/ mushroom water feature
- Locker rooms and Restrooms
- Water-slide
- Concessions



## **FACILITY DESIGN**

### **Introduction**

The Aquatic and Recreation Center will consist of two facilities, a swimming pool complex and a recreation center, to be used by residents of the surrounding areas, including the communities of Madison, Esparto, Capay, Brooks, Guinda and Rumsey. The site, 220 feet by 350 feet, covers an area of approximately 1.77 acres, and has an enclosed building area of a little over 5000 s.f.

Revenue to operate the center will come in part from funds earned from renting out the Multi-Purpose Room and the main pool facility for various activities and events. Access to the pool will also be on a fee basis.

The pool will be open from May to September, 7 days a week. All components of the center will be handicap accessible.

## **AQUATIC CENTER**

### **Outdoor Facilities**

The pool will be ADA accessible and provided with a ramp and a transfer station. At least 2 accessible means of entry are required, the primary entry by means of a lift or ramp, and the secondary entry by transfer wall or other transfer system). A ramp into the pool is preferred over the lift.

A kind of "L" shaped layout is envisioned with the short leg of the "L" a shallow Activity Pool and the long leg the Lap Pool.

#### **Lap Pool(3,300 s.f.)**

A 25-yard x 6 lane lap pool (75'x44'-1") with a connection to the adjacent family activity/wading pool at the shallow end (described below). Entry is by a ramp at the connection with

the family activity area and a ladder and steps. The pool will provide activity space for lap swimmers, swim lessons, water aerobics classes and water play.

The lap pool will be 6' deep or greater at one end and 4' at the other to accommodate a variety of activities when needed. Two lanes of the 6 will be for continual lap swimming, with the other 4 lanes designed with removable lane dividers for open swim activities. Each lane will be 7' in width.

#### **Family Activity/Wading Pool (1550 s.f.)**

The family activity pool area will have a wading area which is shallow enough for toddlers and parents. Entry is by stairs, which will act as seat walls for adults and accommodate toddler play.

A central water play feature and structure are desired; however, they will not be under Phase I construction. These elements will be listed as Phase II in the conceptual design.

#### **Pool Capacity**

Pool capacity is determined by calculating 20 sq.ft. per bather. With the current assumptions and pool sizing the maximum capacity for each pool is:

\* Lap Pool @ 3,300 s.f./20 = 165 bathers

\* Wading Pool @ 1,550 s.f./20 = 78 bathers

\* Maximum Capacity = 243 bathers

#### **Indoor Facilities**

The indoor facilities occupy a little over half of the building, an area of approximately 2950 s.f., and include user facilities, building and pool equipment rooms and storage areas.

**Locker/Changing Room & Restroom Facilities (2,000 s.f.)**

These will include Men's and Women's showers, restrooms, lockers, wet and dry vanities, and changing space. Men's and Women's areas will be 1,000 sq.ft. each.

Shower area to include an open shower area with one accessible station, minimum.

The number of plumbing fixtures (i.e. toilets, sinks, and showers) required will be determined by the final maximum occupancy number for the pool. For a maximum occupancy of 243 bathers, the Men's locker room will require 2 toilets, 1 urinal, 3 sinks, and 5 showers minimum. The Women's locker room will require 5 toilets, 3 sinks and 5 showers minimum. One of each type of fixture is required to be accessible.

Each locker area to include benches for changing, an infant changing table, wall hooks for hanging personal items and 25 lockers minimum.

Wet vanity areas to include mirrors and sinks.

Dry vanity areas to include mirrors and shelf space as well as room for wall mounted hair dryers and electrical outlets.

**Mechanical, Electrical & Telecom (300 s.f.)**

These areas to include essential support spaces for electrical, mechanical and telecommunications. Depending on the type of Mechanical system selected, some of these functions may be able to be located outside of the main building in a gated yard or on the roof in a well. Assumptions at this stage are for a Mechanical Room at 200 SF and an Electrical/Telecommunications Room at 100 SF.

**Pool Support & Storage (400 s.f.)**

Separate mechanical and storage areas will be required to support the pool, apart from the Recreation Center needs.

## **RECREATION CENTER**

The Recreation Center occupies a little less than half of the total building, approximately 2160 s.f., and includes a lobby, office space and the multi-purpose room.

### **Central Lobby (239 s.f.)**

The entrance at the lobby invites people into the building. It provides space for greeting, registering for programs, socializing and for entry into the multi-purpose room.

### **Offices (450 s.f.)**

The office space includes the registration and cashier's office with a window to the lobby at 125 s.f., the main office at 215 s.f., a small support office/concession space at 50 s.f. and a small storage room at 44 s.f. The office spaces will need computer connections and space for lockable files.

The offices are located at the central pool entrance to monitor who is coming and going. A separate transaction window is provided at the registration office for separate operation of pool facility when needed.

The concession space will have a transaction window accessible to the pool and adjacency to the main office. Snack foods and drinks (no prepared foods) will be sold. No kitchen appliances will be required. Lockable storage cabinets with shelves should be provided.

When not being used as a concession stand, this space can be used as storage or support for the adjacent offices.

### **Multi-Purpose Room (960 s.f.)**

This space will accommodate many functions: arts and crafts classes, exercise and other activity classes, special meeting rooms or small events. A manually operated, fold-away, sound

partition wall will divide the space into two unequal sized spaces to accommodate dual uses at the same time. The fold-away wall will be designed to store when not in use.

Storage needs specific to this space will be accommodated in two ways: a storage room for stackable chairs, folding tables and exercise mats and cabinets and/or a narrow storage closet with shelves on one or two walls for easels, art supplies and general storage. All storage to be lockable.

One end of the larger room will have sinks located in the counter for art activities and flooring to support these activities (i.e. sheet vinyl, linoleum).

The larger space will have ample natural light through a large bank of windows and glass doors. The smaller room, with fewer windows, and can be more easily darkened and has a large wall for a white board. The larger room will need to have block-out shades when required for meeting needs.

It would be very desirable to landscape the outdoor activity area and divide it into sub-areas to make it attractive for special events as well as for class activities.

### **Storage (100 S.F.)**

One general purpose storage room for custodial equipment, supplies, and miscellaneous equipment will be provided within the Aquatic or Recreation Center building. Access to the exterior is not required.

## **OUTDOOR SPACES**

Access to the Aquatic and Recreation Center entrances is adjacent to the parking lot and bicycle parking station. Some benches are provided here for those waiting to be picked or just wanting to linger a while.

The entrance to the offices and multi-purpose room is at the front of the building while the pool and surrounding deck and lawn areas are accessed through a breezeway, which is covered with a translucent fiberglass roof that illuminates the passageway and the offices along its path. The breezeway provides the necessary entrance control into the pool area and access to the locker/restroom facility, outdoor showers, pool deck and lawn areas and required accessibility into the pool.

An important design feature of the Aquatic and Recreation Center are the outdoor lawn covered lounging and play areas on three sides of the pool. These and landscaped walkways and landscaped outdoor activity and meeting areas outside the multi-purpose room will function as outdoor rooms and as visual extensions of indoor rooms. Shade trees and a shade structure will enhance the outdoor environment and provide relief from the hot summer sun.

A minimum level of fencing will be required around the facility for security. Depending on the final site selection, the fencing and/or wall design may also need to address privacy, safety and noise issues.

A parking lot with 26 paved parking spaces and a designated passenger drop-off area and service drive are provided. An additional 35 parking spaces will be available in an adjacent gravelled surface overflow lot. Total parking capacity will be 60 minimum.

## DESIGN PROPOSAL

### DESIGN CRITERIA AND ASSUMPTIONS

Energy efficiency and optimal solar orientation were key design criteria. The site and building are oriented so as to take advantage of the southern sun summer and winter and to shelter the outdoor areas from north winds. The building was designed to take south-facing solar hot water collectors to heat the pool water and photo voltaic solar panels to generate some or all of the building's electrical needs.

The building is designed as two independent units, separated by a breezeway, each serving a distinct function and treated differently architecturally. The western half of the building houses the locker rooms and mechanical, electrical and pool equipment rooms. It has full height cathedral ceilings, high windows (or louvers) for privacy and an extended central portion of the roof over the locker rooms for clerestory windows or louvers. This half of the building will not be heated or cooled but will be well insulated and have good natural cross-ventillation.

The eastern half of the building houses the center offices and the multi-purpose room. There will be 10" ceilings in the offices and cathedral ceilings in the multi-purpose room. A whole house fan will exhaust hot air through the attic summer nights and draw in cooler night air through operable transoms over all the exterior doors. The transoms can also be left open during the day in fair weather to increase room cross-ventillation.

Aesthetically the building has been designed as a simple, vernacular structure that would be at home in the Capay Valley. Traditionally it would have vertical or board and batten siding or metal panel walls. A metal roof would be most appropriate.

Stucco or cementitious siding, such as Hardie board are a viable alternative. Stucco, when well done, can create an attractive building. A corrugated metal roof, which is more affordable than a standing seam roof, is a reasonable alternative. With a suitable budget insulated cement block, insulated tilt-up or gunnite concrete or perhaps straw bale construction could be used for the walls.

As shown in the plans and rendering, the building is represented as a wood frame building with 2X6 walls for high R-value insulation, stucco walls and a corrugated metal roof.

Interior materials would be green alternatives where feasible. Otherwise materials, such as basic gypsum board walls, concrete floors where possible, recycled carpet or linoleum elsewhere, fiberglass or metal doors, MDF trim and moldings will be used.

Energy efficient fluorescent lighting is mandated by the state, but effective design can create a lively, attractive and non-institutional environment.

And lastly, as possible, a sensitive use of color inside and outside can greatly enhance the overall appearance and quality of the interior space.