



safe boating hints for the

Sacramento River



STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF BOATING AND WATERWAYS

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History and Physical Description of River

The Sacramento River is California's largest river, draining approximately 26,300 square miles of the northern Central Valley. The river, which carries nearly one-third of the total annual runoff of all California streams, is fed along its journey to the Pacific Ocean by its major tributaries, the McCloud, Pit, Bear, Yuba, Feather and American Rivers.

As the Sacramento River Valley became settled by farmers and ranchers in the mid-1800's, the Sacramento river began to serve as a highway for transporting goods and people as well as supplying water for irrigation and drinking water.

The Sacramento River was first modified by man when settlers built levees to protect their farmland. The Sacramento River Flood Control Project, which was authorized by Congress in 1917, further modified the river with a comprehensive system of levees, overflow weirs (low dams), pumping plants, bypass channels, and channel enlargements. Under this project, approximately 980 miles of levees were constructed or improved to control widespread and frequent flooding of communities and agricultural land in the Sacramento River basin.

The Sacramento River begins near the slopes of Mt. Shasta, about 60 miles north of Redding, and flows southward until it joins the San Joaquin River and then empties into Suisun Bay.

The Sacramento River today supports a variety of recreational activities including boating, fishing, waterskiing, hiking, picnicking and camping. While most of the land along the river is privately owned, there are fishing resorts, public parks, boat ramps, and various access sites to accommodate recreationists along the length of the river.

Navigating the Sacramento River can be an enjoyable experience if you familiarize yourself with its special characteristics. The following will provide some assistance in navigating the entire river route.

Mt. Shasta to Shasta Lake This 43-mile stretch of river is considered a whitewater run and is not suitable for powerboats.

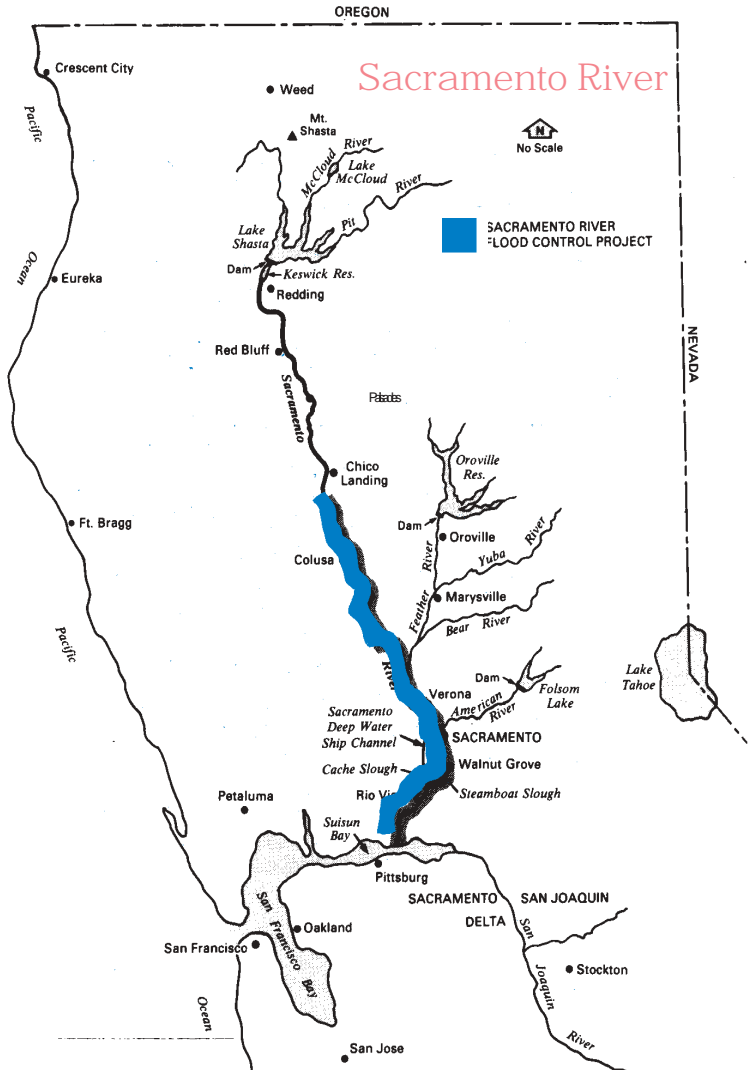
Redding (Keswick Dam) to Colusa Boat launching facilities and good boating conditions are available to the public within the Redding area. There are no nautical charts to show the water depths between Keswick Dam and Colusa and the channel is not dredged. The water may be swift, and the depth changes continually due to shifting sands and silt. Boat operators should watch the river bed carefully to find the channel. Due to the shifting channel, snags, submerged debris, and shallowness, motorboats may have difficulty navigating portions of the river. Diversion dams block the river at Redding and Red Bluff.

Boaters should be aware of the impassible irrigation diversion dam located just upstream of State Highway 273 in Caldwell Park. Boaters traveling downstream should launch downstream at Turtle Bay Park in order to avoid this hazard.

Boaters should also be aware of the seasonal closure of the Sacramento River at the Red Bluff Diversion Dam, which forms Lake Red Bluff on a seasonal basis (May 16 through September 14). The reservoir is located on the Sacramento River about 2 miles southeast of Red Bluff.

Colusa to Feather River Nautical charts are available for this stretch of the river. Because portions of this water route are subject to shoaling, however, the water depths shown may not be reliable.

Feather River to Cache Slough Junction This stretch of the river, which ends a few miles upstream from Rio Vista, is one of the more popular stretches of the river and also an area where a number of boating accidents occur. In recent years more than half of all boating accidents on the Sacramento River occurred in this stretch. Boaters should navigate with extra caution. While this section of the river is no longer dredged, the depth of the main river channel is about six feet deep between the Feather River and the City of Sacramento, and about 10 feet deep between Sacramento and the river junction at Cache Slough. Consult nautical charts showing the river depths for this stretch of the river, as well as areas downstream. Be aware that heavy shoaling has been reported in the Sacramento River at its confluence with the Feather River. Boaters should check water depths in areas subject to frequent or seasonal shoaling.



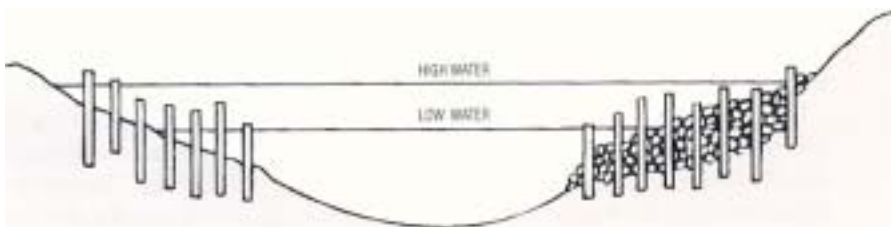
Below Cache Slough Junction A dredged channel is maintained beyond this point. In addition, Cache Slough is dredged since it is part of the Sacramento River Deep Water Ship Channel. Pay attention to channel markers — low tides expose mud flats.

Boating Hazards

Along the entire length of the river there are natural and man-made underwater obstructions. Those described below are emphasized because they are responsible for a large number of boating accidents on the river.

Piling In some areas the remains of old piers extend from the river bank. Some piles are exposed and others are broken off just under the surface. Their presence is sometimes indicated on the surface by swirls or eddies.

Wing Dams A wing dam is an underwater wall of piling or rock extending from the bank into the river. Its purpose is to prevent bank erosion. Although many of the wing dams have been removed from the Sacramento River, about 40 still remain between the American River and Verona. They are usually visible only when the river is low. The boater can avoid wing dams by following the main channel. The presence of wing dams, like other underwater obstructions, may be indicated by ripples, eddies, or swirls. Some wing dams are marked by seasonal buoys.

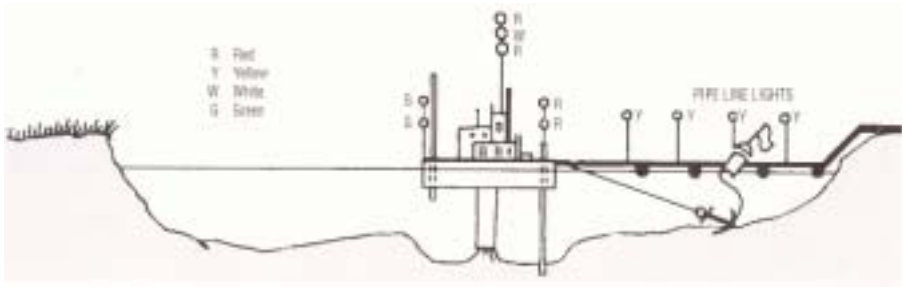


Debris During the winter and spring when the water level is high and the current strong, much debris is carried down the river. This debris may lodge against docks, piles, and bridges or float in midstream. Drifting trees and large timbers may be grounded in shallow areas, and if submerged, may be hard to see. Such obstructions are particularly prevalent above Colusa. Debris may also be encountered midstream during the summer when the water level is low and there is no wind to hold it close to shore. Boaters are advised to keep a proper lookout and reduce speed to minimize the risk of hitting floating or partially submerged debris.

Ferry Cables Ferries operated by cables constitute a special hazard. When the ferry is under way, its cables are pulled taut and extend from both ends. Fatal accidents have occurred when vessels have attempted to pass over or under these cables while the ferry was in operation. When the ferry is secured at its landing, however, the cable is lowered and does not impede navigation. A cable ferry sometimes operates at Princeton— above Colusa—and others may operate elsewhere. Boaters are advised to check with local authorities and nautical charts for current information on ferry placement.



Dredges Floating platforms, dredges, or barges engaged in dredging or construction may be at work anywhere on the river. At night, the dredges and their pipelines should be well lighted. Anchor buoys indicate the ends of the cables holding the dredge in place.



Water Conditions

Wakes can be extremely hazardous to small boats in confined areas. Operators of small craft should always be watching for approaching wakes. Operators of vessels which create large wakes should respect the rights and safety of others and must realize they are legally responsible for any damage their wake may cause.

Whirlpools caused by currents meeting obstructions can be dangerous to small boats. Avoid turbulent water if possible.

During the winter and early spring months, the river may rise due to flood control releases. Winter flows cause extremely swift currents and, in narrow channels, maneuvering becomes difficult and dangerous for boaters who are not used to navigating under such conditions. Know the limitations of your vessel and your skills for various wind and current conditions. Swift currents have been known to overpower large and small vessels. Wearing a life jacket at all times when boating under adverse conditions may save your life if you find yourself in the water. Be sure you have the proper size life jacket aboard for each passenger. Additional safety hints for boating at high water levels include:

- If you are an inexperienced boater, stay ashore when the river current is extremely swift.
- Have a marine radio aboard to call for emergency assistance.
- Stay away from areas where the water is flowing over a levee. The force of the water can flip a small boat or pull the boat over the levee.
- Stay in the center of a well-defined channel. Winter flows coupled with high tides compound the hazard of running into submerged brush and trees.
- Carry tools for emergency repairs and an extra propeller.
- If your boat is docked, increase the number and/or the size of your mooring lines.

For water flow and tide conditions, call the Department of Water Resources Flood Operations Center at (800) 952-5530. Some local newspapers carry reports on river conditions.

Weather

Fog and wind are two major weather features to be considered in this area. Before your boating trip, consult a local newspaper or radio station that provides frequent forecasts to determine expected weather conditions. The Coast Guard and local AM or FM commercial radio and TV stations also provide frequent, updated weather reports. Twenty-four-hour continuous weather information for the Central Valley is broadcast on 162.400 MHz (VHF-FM) which can be received on Weather Channel 2 of a marine radio. Sudden or unexpected adverse weather may be reported as part of the Local Notice to Mariners broadcast on marine radio Channel 16.

Darkness

Boating at night creates special hazards for boaters. Underwater obstructions become more dangerous at night, especially if not marked or lighted. While all vessels are required to show proper running lights between sunset and sunrise and during periods of restricted visibility, be on the lookout for those vessels that are not exhibiting lights as required by law.

When anchoring at night, recreational vessels must display an anchor light—an all-around white light visible for two miles—exhibited where it can best be seen. Anchoring in midchannel is prohibited by law and creates an additional hazard whether the vessel is lighted or not.

Aids to Navigation

Going upstream, the river channel is marked with lighted buoys or lighted beacon structures as far as Sacramento. These navigational aids are shown on nautical charts. Boaters should not place full reliance on these aids; buoys can be carried away, shifted or sunk by current or debris. Sunken buoys can be extremely hazardous and if detected should be reported to one of the agencies listed on the back of this pamphlet.

Charts

Nautical charts provide information regarding water depths, hazards, locations of navigational aids, and identifiable landmarks to assist the boater in navigation. The following charts cover the Sacramento River area:

- 18661SC, San Joaquin River (lower Sacramento River)
- 18662SC, Sacramento River (Andrus Island to Sacramento)
- 18664, Sacramento River (Sacramento to Colusa)

Supplemental navigation information, such as weather, routes, navigation regulations, outstanding landmarks, channel and anchorage peculiarities, and hazards can be found in the National Oceanic and Atmospheric Administration (NOAA) publication, *United States Coast Pilot #7*.

Changes to charts and the *Coast Pilot* are reported in the "Local Notice to Mariners," which is available free of charge from the Coast Guard, Coast Guard island, Alameda, CA 94501-5100. Charts and the *Coast Pilot* may be purchased from authorized nautical chart agents.

Bridges

There are a number of bridges spanning the Sacramento River and its tributaries. Boaters planning a Sacramento River trip that requires bridge passage should consult nautical charts to determine the minimum vertical clearance allowed by all bridges to be encountered. Clearances noted on charts are those which exist at mean high water. At times of exceptionally high water, clearances may be reduced. Generally, the drawbridges below the American River junction will open for large craft or a sailboat with a high mast during peak boating hours, when requested via sound signals (a prolonged blast—4 to 6 seconds—followed by a short blast—1 second), visual signals, or radio contact. All radio-equipped bridges having a drawtender monitor Channel 16 (156.80 MHz). Most use Channel 9 (156.45 MHz) as the working frequency. Some bridges may require as much as 12 hours advance notice to open. Remain clear of a drawbridge until it opens.

Information on individual bridge opening requirements and hours of operation can be found in the free U.S. Coast Guard booklet "California Drawbridge Regulations" which can be obtained by writing Commander (oan), U.S. Coast Guard, Coast Guard Island, Alameda, California 94501-5100.

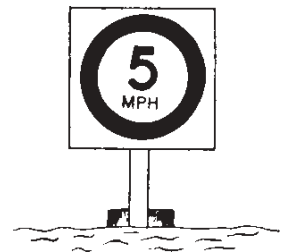
Sacramento River Deep Water Ship Channel

Although the William G. Stone Lock, located at the northern end of the Sacramento River Deep Water Ship Channel, is not currently in operation, the channel can be entered from the Delta to the south. There are no public ramps available in the turn basin.

Water skiing, fishing sailing, and cruising are commonplace in the channel. Boaters should exercise extreme caution, however, when meeting a ship in the channel. The large freighters and tankers which use the channel cannot maneuver or stop quickly. Because of their deep draft, they are limited in movement and have the right-of-way. Boaters should not anchor in the channel when ships are in transit.

Speed Limits

Speed is restricted in various areas of the river. Many, but not all, of these areas are posted. Speed zones are marked by signs showing an orange circle around a black numeral. *State law restricts speed to 5 miles per hour when passing within 200 feet of any docks or floats in use, or within 100 feet of swimmers, whether or not speed is posted.*



In order to reduce damage to levees and property during times of extreme high water, care should be taken to minimize wakes and resulting wave action. Special ordinances may impose emergency speed controls during times of combined high tides, heavy runoff, and flooding.

When You Need Assistance

A marine radio is a good friend of the mariner in distress. Most enforcement agencies that patrol this river monitor Channel 16 (156.80 MHz). Many also monitor CB Channel 9. However, the quickest remedy may be to seek the aid of a passing boat. Shoreside, dial 9-1-1.

It is recommended that you leave a travel plan with a responsible person who will notify authorities if you are overdue. Include in the plan your launch site, destination, description of vessel, CF number, and expected time of return. For a sample float plan, see the "ABCs of the California Boating Law," which is available free from the Department of Boating and Waterways and many Department of Motor Vehicle offices.

For More Information

The various agencies that patrol the Sacramento River can provide local river safety information. During weekdays contact (nonemergency numbers):

Butte County Sheriff's Office: (916) 538-7321
Colusa County Sheriff's Office: (530) 458-0200
Contra Costa County Sheriff's Marine Services Bureau: (925) 427-8507
Glenn County Sheriff's Office: (530) 934-6441
Sacramento City Police: (916) 277-6170
Sacramento County Sheriff's Office: (916) 875-0493
Shasta County Sheriff's Office: (530) 245-6000
Solano County Sheriff's Office: (707) 421-7084
Sutter County Sheriff's Department: (530) 822-7307
Tehama County Sheriff's Office: (530) 529-7930
U.S. Coast Guard at Rio Vista (707) 374-2871
—8 a.m. to 10 p.m. only
U.S. Coast Guard at San Francisco (415) 399-3478
West Sacramento Police Department: (916) 372-2461
Yolo County Sheriff's Office: (530) 668-5280

For information on non-motorized boating opportunities along the Sacramento River, write for a free copy of *A Boating Trail Guide to the Sacramento River, from Woodson Bridge to Colusa* from the Department of Boating and Waterways.

Remember

- It is illegal to operate a boat under the influence of alcohol or drugs.
- Litter and refuse ruin our waterways and can create health hazards.

BOATING SAFETY CLASSES explaining required and recommended equipment for small boats and offering training in good seamanship are conducted throughout California by the U.S. Coast Guard Auxiliary, the U.S. Power Squadrons and certain chapters of the American Red Cross. For information on Coast Guard Auxiliary and Power Squadron classes, call (800) SEA-SKIL (732-7545) or (800) 368-5647. Hands-on boating safety courses are also offered at aquatic centers managed by colleges, cities and counties, and other non-profit organizations throughout the state. For a list of organizations affiliated with the Department, see our Website. The Department of Boating and Waterways offers a free home study course entitled *California Boating Safety Course*. For more information, e-mail us at pubinfo@dbw.ca.gov, or phone (916) 263-1331 or tollfree (888) 326-2822, or write: Department of Boating and Waterways, 2000 Evergreen Street, Suite 100, Sacramento, California 95815-3888. Visit our Website at www.dbw.ca.gov.