Waterway Markings

Federal Lateral System

U.S. waterways are marked for safe navigation by the lateral system of buoyage. The system uses a simple arrangement of colors, shapes, numbers and light characteristics to show the side on which a buoy should be passed when proceeding in a given direction. The characteristics are determined by the buoy’s position with respect to the navigable channels as the channels are entered from seaward.

The expression “red right returning” has long been used by seafarers as a reminder that the red buoys are kept to the starboard (right) side when proceeding from the open sea into port (upstream). Likewise, green buoys are kept to the port (left) side (see chart below).

Conversely, when proceeding toward the sea or leaving port, red buoys are kept to port side and green buoys to the starboard side. Red buoys are always even numbered, and green buoys are odd numbered. Red and white vertically striped buoys mark the center of the channel.

This diagram shows the course a boat will take following the lateral system of buoyage.
Uniform State Waterway Marking System
Most waterways used by California boaters are located entirely within the boundaries of the state. The California Uniform State Waterway Marking System has been devised for these waters. For examples of such markers, see chart below.

The waterway marking system employs buoys and signs with distinctive standard shapes to show regulatory or advisory information. These markers are white with black letters and orange borders. They signify speed zones, restricted areas, danger areas and general information.

Aids to navigation on state waters use red and green buoys to mark channel limits, generally in pairs. Your boat should pass between the red buoy and its companion green buoy.
**MAIN CHANNEL BUOYS**

**PORT SIDE:**
Odd number aids, green light only

**STARBOARD SIDE:**
Even number aids, red light only

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<tr>
<th>FIXED</th>
<th>FLASHING (2)</th>
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<th>OCCULTING</th>
<th>QUICK FLASH</th>
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**LIGHTED BUOY:**
Odd number, increasing toward head of navigation, leave to port (left) when proceeding upstream.

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<tr>
<th>&quot;1&quot;</th>
<th>&quot;3&quot;</th>
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**LIGHTED BUOY:**
Even number, increasing toward head of navigation, leave to starboard (right) when proceeding upstream.

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<th>&quot;2&quot;</th>
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**PREFERRED CHANNEL BUOY:**
No numbers, may be lettered
Topmost band denotes preferred channel. Letter has no lateral significance. Used for identification and location purposes.

**COMPOSITE GROUP FLASHING (2 + 1)**

**STARBOARD**

- LIGHTED BUOY "L"
- UNLIGHTED CAN "L"

**PORT**

- LIGHTED BUOY "L"
- UNLIGHTED NUN "L"

**DAYMARK**

- L

- L
### Mooring to Buoys
Tying up to or hanging on to any navigation buoy (except a mooring buoy) or beacon is prohibited. For examples of these types of buoys, see chart on page 8 and 9.

### Aids to Navigation
Navigation aids assist vessel operators in verifying their position and cautioning them of dangers and impediments. Listed below are the common identifiers as seen on pages 6–9:

- Port-hand buoys are painted green, with green fixed or flashing lights.
- Starboard-hand buoys are painted red, with red fixed or flashing lights.
- Safe water buoys, also called midchannel or fairway buoys, and approach buoys are painted with red and white vertical stripes, with flashing lights.
- Preferred channel, or junction buoys, are painted with red and green horizontal bands, with flashing lights.
- Special marks (traffic separation, anchorage areas, dredging, fishnet areas, etc.) are painted yellow. If lighted, the light may be fixed or flashing.

#### SAFE WATER AIDS

**SAFE WATER BUOY MARKS MIDCHANNEL:**
No numbers—may be lettered, white light only

- **MORSE CODE (A):**

  ![Morse Code](image)

- **LIGHTED AND/OR SOUND:**
  Marks midchannel, pass on either side. Not numbered, may be lettered. Letter has no lateral significance. Used for identification and location purposes.

  ![Lighted and Sound](image)

- **SPHERICAL**
- **MR**

#### SECONDARY CHANNEL BUOYS, STARTS NEW NUMBERING SYSTEM

- **PORT**
  - **C “1”**
  - **UNLIGHTED CAN BUOY:**
    Odd number, leave to port.

  ![Port Daymark](image)

- **STARBOARD**
  - **N “2”**
  - **UNLIGHTED NUN BUOY:**
    Even number, leave to starboard.

  ![Starboard Daymark](image)