Beneficial Uses:
California Perspective

Water Quality Standards Academy
California
May 11, 2008
Water Quality Standards: Beneficial Use Component

- Beneficial Uses
- Antidegradation Policy
- Water Quality Standards
- Water Quality Objectives
Beneficial Uses = Designated Uses

- Those uses specified in State or Tribal water quality standards rules for each waterbody or waterbody segment, whether or not those uses are being attained.
  - 40 CFR 131.3(e)
- Goals or “desired” uses of a waterbody

- Existing use – a use that was actually attained in a waterbody on or after November 28, 1975*
  - “Actually attained” =
    1) Use has occurred or
    2) Water quality has been sufficient to support use
- Not just current/present use – includes some historical uses, too

*Date of original water quality standards regulation
Federal & State Terminology

Federal Parlance

- Designated Uses
  - Existing Uses

CA State Parlance

- Beneficial Uses
  - Existing or Intermittent Uses
  - Potential Uses

FEDERAL DESIGNATED USES = CA STATE BENEFICIAL USES
CA Potential Uses

- May be existing, but no documentation of use
- May be a “goal” use – i.e., one that is not existing
  - Past use (occurring before November 28, 1975)
  - Desired use
    - Plans to put water to such future use;
    - Conditions make such future use likely;
    - Statewide policy (Sources of Drinking Water Policy);
    - Designation by Regional Board as goal use;
    - Public desire to put water to such use.
Application of Beneficial Uses in CA: “Waters of the State”

- In CA, beneficial uses apply to “waters of the state”, which means *any surface water or groundwater*, including saline waters, within the boundaries of the state.

- Broader application than federal designated uses, *includes groundwater and some isolated surface waters*

- “Waters of the U.S.” does *not* include groundwater and “isolated, intrastate and nonnavigable waters”
Application of Beneficial Uses in CA (cont.)

- Specific waterbodies / groundwater basins
- Entire hydrographic unit
- Tributary rule - The beneficial uses of any specifically identified water body generally apply to all its tributaries
  - Similar rule for groundwater
Statutory Use Categories

Federal Clean Water Act §§ 101(a)(2), 303(c)(2)(a)

- ...it is the national goal that wherever attainable, an interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water be achieved ...;

- ...Such standards shall be such as to protect the public health or welfare, enhance the quality of water ... taking into consideration their use and value for public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial, and other purposes, and also taking into consideration their use and value for navigation.

Cal. Water C. §13050

- “Beneficial uses” of the waters of the state that may be protected against quality degradation include, but are not limited to, domestic, municipal, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves.
<table>
<thead>
<tr>
<th>Federal CWA Categories</th>
<th>Cal. Water C. Categories</th>
<th>CA Basin Plan Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propagation of fish, shellfish &amp; wildlife</td>
<td>Preservation and enhancement of fish, wildlife, and other aquatic resources or preserves</td>
<td>WARM, LWRM, COLD, SAL, EST, MAR, WILD, BIOL, ASBS, RARE, MIGR, SPWN</td>
</tr>
<tr>
<td>Recreation in &amp; on the water</td>
<td>Recreation; aesthetic enjoyment</td>
<td>REC-1, Limited REC-1, REC-2, COMM, SHELL</td>
</tr>
<tr>
<td>Public water supplies</td>
<td>Domestic and municipal supply</td>
<td>MUN*</td>
</tr>
<tr>
<td>Agricultural use</td>
<td>Agricultural supply</td>
<td>AGR*</td>
</tr>
<tr>
<td>Industrial use</td>
<td>Industrial supply</td>
<td>IND*, PRO*</td>
</tr>
<tr>
<td>Navigation</td>
<td>Navigation</td>
<td>NAV</td>
</tr>
<tr>
<td>Other purposes</td>
<td>Power generation; other beneficial uses</td>
<td>GWR, FRSH, POW, AQUA, WET, FLD, WQE, CUL, FISH</td>
</tr>
</tbody>
</table>
Protection of Beneficial Uses

- Generally, Existing and Potential Uses are protected with the same water quality standards.
- “Rebuttable presumption” that fishable – swimmable uses are attainable.
  - Most surface waters are designated with REC & aquatic life beneficial uses.
- Existing uses – whether designated or not – must be protected.
Revising Beneficial Uses

- 23 standardized beneficial use categories developed in mid-1990s
- New beneficial use categories, or subcategories, may be added by individual Water Boards
  - Wetland: WET, FLD, WQE
  - Cultural: CUL
  - Subsistence fishing: FISH
  - Limited Warmwater habitat: LWRM
  - Limited contact recreation: LREC-1
Revising Beneficial Uses

- Requires Basin Plan Amendment
  - Create new use category or subcategory
    - Demonstrate necessity of new beneficial use definition
  - Designate waterbodies with beneficial use
    - Demonstrate that use “exists” or has the potential to occur in the water body
  - De-designate or downgrade use
    - UAA and 40 CFR 131.10(g) factors
- Requires adoption by RB & approval by SB, OAL, and EPA [for surface water only]
De-designating Beneficial Uses

- May not remove an existing use [40 CFR 131.10]
- If use is not existing
  - For surface water, follow federal regulations at 40 CFR 131.10(g)
  - For groundwater, no explicit requirements
    - Demonstrate that use is not a “past, present or probable use”
- For MUN use, demonstrate that an exception is met [Statewide Sources of Drinking Water Policy (SB Res. 88-63)]
- Consider antidegradation
- Triennial Review of waterbodies not designated as fishable/swimmable
California UAAs (cont.)

- **REC**
  - Natural intermittent or low flow conditions
  - Hydromodifications
  - Other considerations: access, recreational facilities, location & safety

- **SHELL**
  - Natural intermittent or low flow conditions
  - Hydromodifications
  - Natural physical features unrelated to WQ
California UAAs (cont.)

- **MUN**
  - Naturally occurring pollutant concentrations
  - Natural intermittent or low flow conditions
  - Others

- **Aquatic Life Uses**
  - Hydromodifications
  - Others
Emerging Beneficial Use Issues in CA

- **REC Uses**
  - REC-1 Use in engineered channels
  - REC-1 Use & impacts from natural sources of bacteria

- **Wetland Beneficial Uses**
  - Beneficial uses (WET, FLD, WQE)
  - Statewide effort – new beneficial use definitions & corresponding WQOs

- **Subsistence Fishing**
  - New beneficial use (Region 1)
  - Available survey instruments to document use

- **Shellfish Beneficial Use – commercial, recreational, bait**
  - Survey of use (2008)

- **Tiered Aquatic Life Uses ("TALU")**