Overview of California Department of Fish and Wildlife Regulatory Authority and Beneficial Uses of the Los Angeles River

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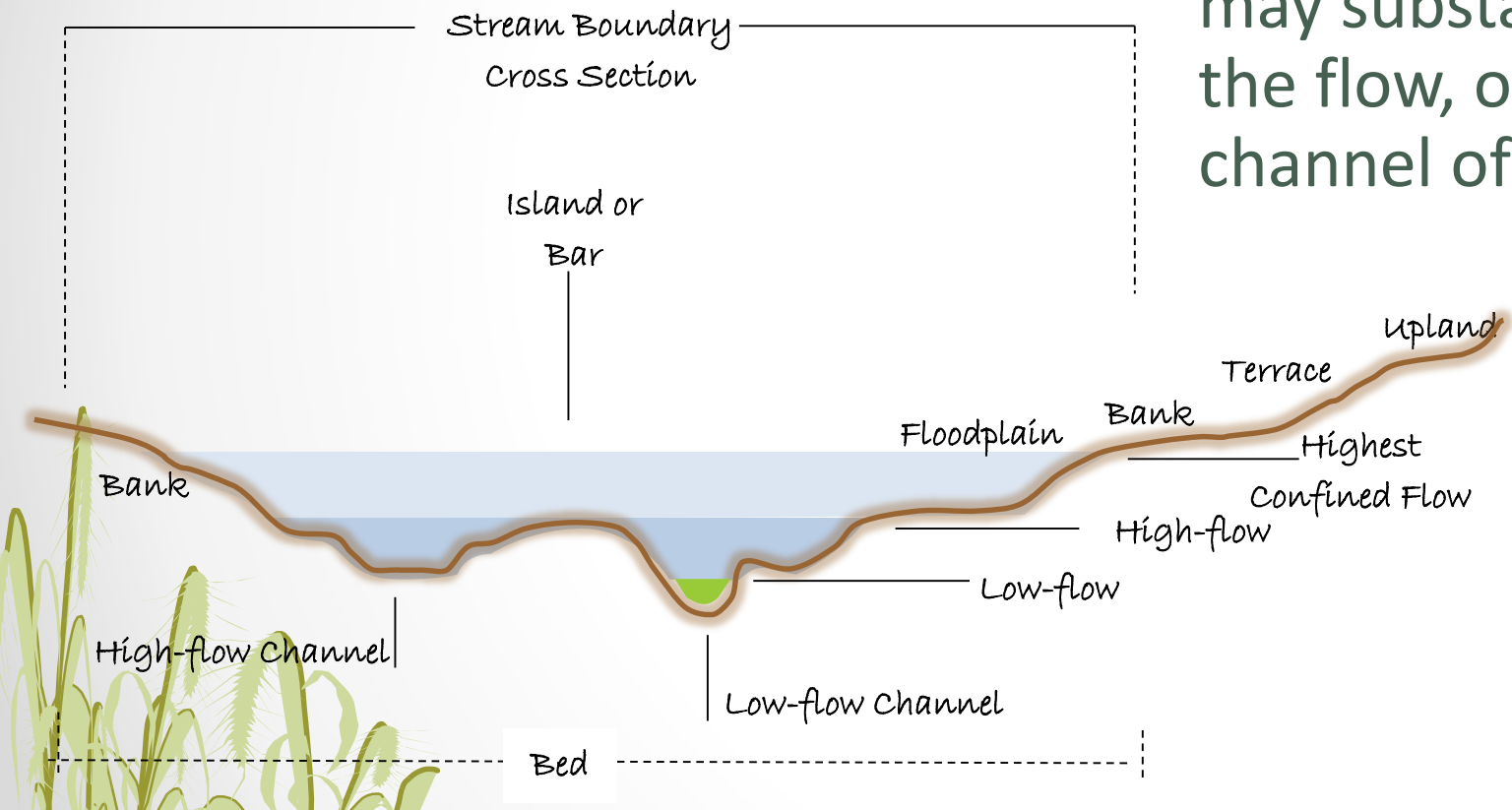
California Department of Fish and Wildlife Regulatory Authority

- California Environmental Quality Act
- Lake and Streambed Alteration
- California Endangered Species Act
- Fish and Game Code 5900 et seq.
- Federal Endangered Species Act
- Water Rights

California Environmental Quality Act (CEQA)

- **Trustee Agency** (TA): State agency with jurisdiction over resources held in trust for people of California.
- **Responsible Agency** (RA): Agency proposing to carry out or approve a project for which the Lead Agency is preparing a CEQA document.
- **Lead Agency** (LA): the public agency that has the principal responsibility for carrying out or approving a project that is subject to CEQA.

Lake and Streambed Alteration
Fish and Game Code 1600 et seq.



Notification is required if the activities may substantially divert, obstruct, alter the flow, or change the bed, bank or channel of a lake or stream…

The Department will issue an agreement if the proposed action may substantially adversely affect existing fish and wildlife resources.

California Endangered Species Act (CESA)

14 CCR § 783.1-3 and
Fish and Game Code 2080 and 2081:

Prohibits take of species listed under CESA and provides a mechanism for the Department to authorize incidental take.

Federal Endangered Species Act Coordination (ESA)

16 U.S.C. §§ 1531 et seq.: Includes federal policies that require cooperation with the states to the maximum extent practicable, in carrying out ESA to further the recovery of resident endangered species programs.

Federal Restoration Grant Program: State wide program to implement Restoration of Anadromous Fish Habitat.

Fish and Game Code 5900 et seq. Dams, Conduits, and Screens

- **Section 5901** – Identifies Districts where it is unlawful to impede fish passage.
- **Section 5903** – Describes Dam Construction or Enlargement process.
- **Section 5931** – Requires Fishways for Free Passage Over and Around Dams.
- **Section 5937** – Requires Sufficient Water For Fish Existing Below the Dams.

California Water Code

WC § 1211 – Changes to Discharge of Treated Waste Water

- Petition for change must be approved by the State Water Board
- Changes reviewed pursuant to WC §1700 et seq.

WC § 1701.2 – Petition for Change Requirements

- Must include:
- All information reasonably available to the petitioner, or that can be obtained from the Department of Fish and Wildlife, concerning the extent, if any, to which fish and wildlife would be affected by the change
- A statement of any measures proposed to be taken for the protection of fish and wildlife in connection with the change

Beneficial Uses of the Los Angeles River System

Kelly Schmoker, M.S.
California Department of Fish and Wildlife

Los Angeles River Watershed

- The Los Angeles River is 51 miles long, flowing through 14 cities.
- Four reaches of the Los Angeles River are unlined.
  - Upstream of Sepulveda Dam
  - Glendale Narrows
  - Compton Creek
  - Estuary Below Willow Street

Source : USGS

Natural Flow vs Waste Water Effluent

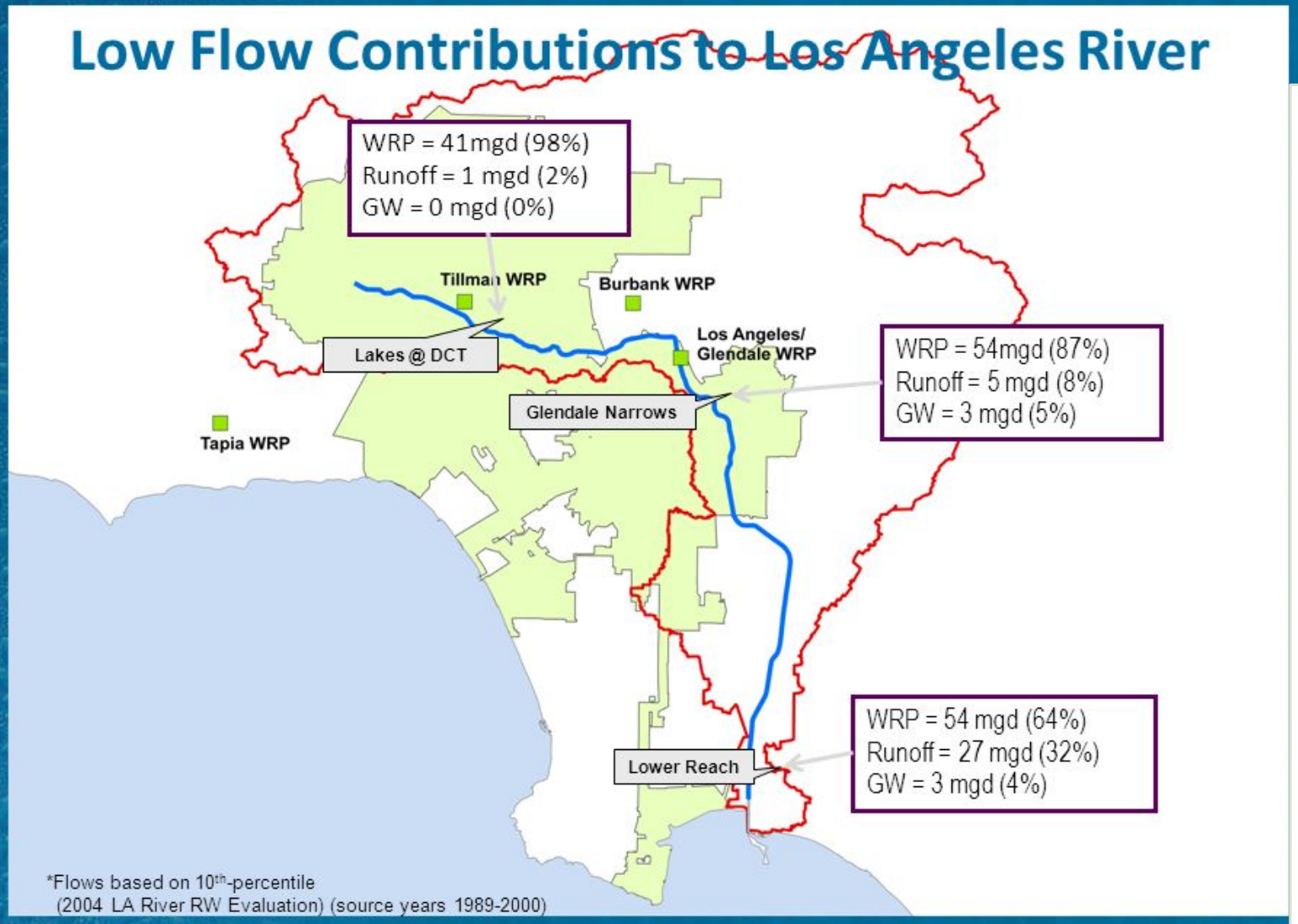


TABLE 1. POTW Discharges to the Los Angeles River, their design capacities and recycled water production (million gallons per day)

POTW DISCHARGER	DATE BUILT	DESIGN DISCHARGE CAPACITY	RECYCLED WATER PRODUCTION
Las Virgenes Municipal Water District Tapia Plant Waste Water Reclamation Plant (WWRP)	1999- outfall to LA River	2	0
City of Burbank WRP	1966	9	1
City of Los Angeles- Glendale WRP	1976	20	4.5
City of Los Angeles- Tillman WRP	1984	80	26

2012 LA River State of the Watershed Report

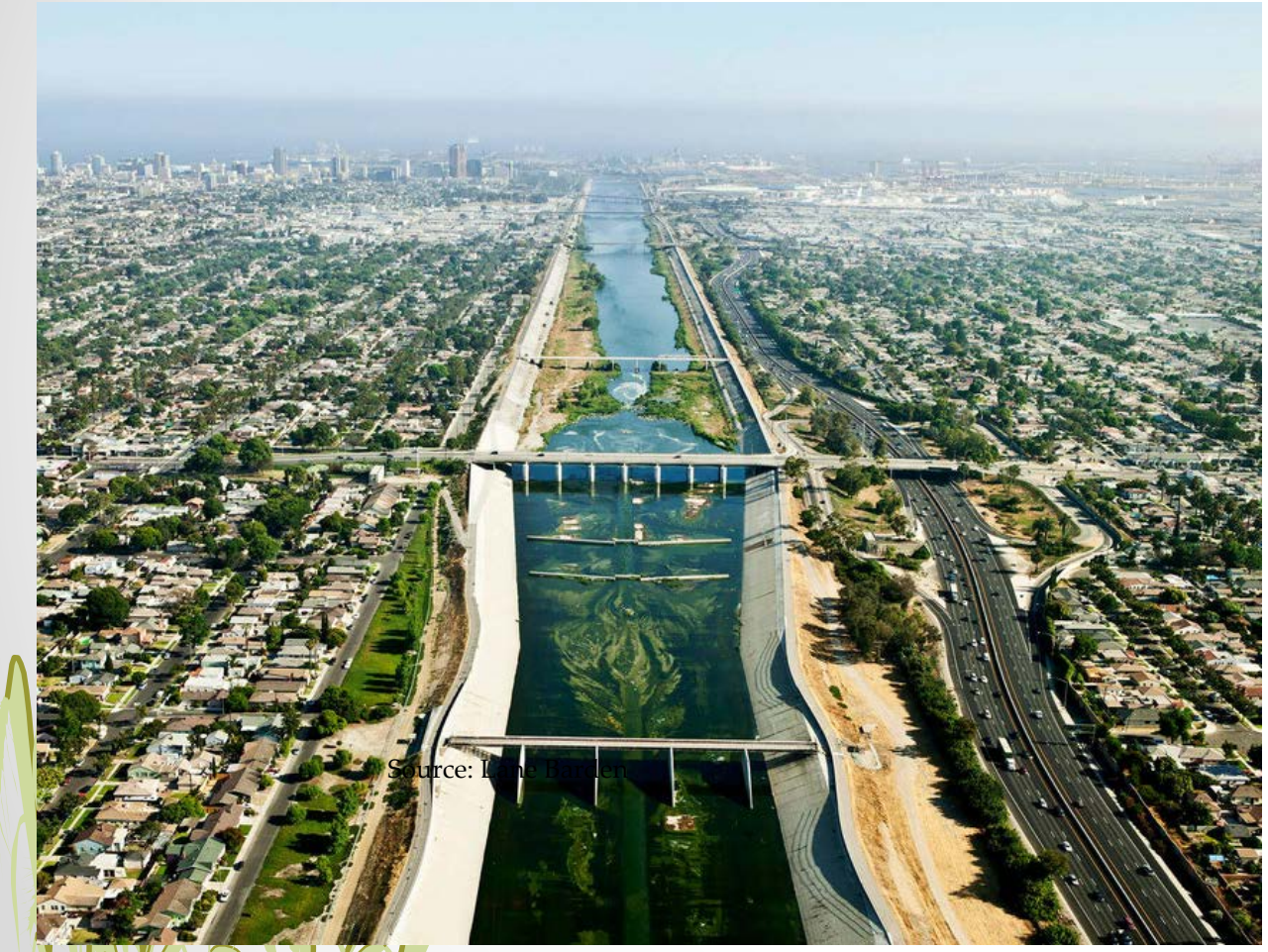
Los Angeles River Estuary

1.46 mile unlined reach between Willow St. Bridge and Queensway Bay

- Year-round flow maintained by
  - Urban Runoff
  - Treated Wastewater
  - Natural Stormflow
- 1000's species depend on estuarine habitat.
- Waste water is the primary contributor to dry-weather flow (2016 fresh water fish survey).

Source: Friends of the Los Angeles River

Los Angeles River Estuary



Source: Lane Barden

Source: FOLAR 2016 Fish Study

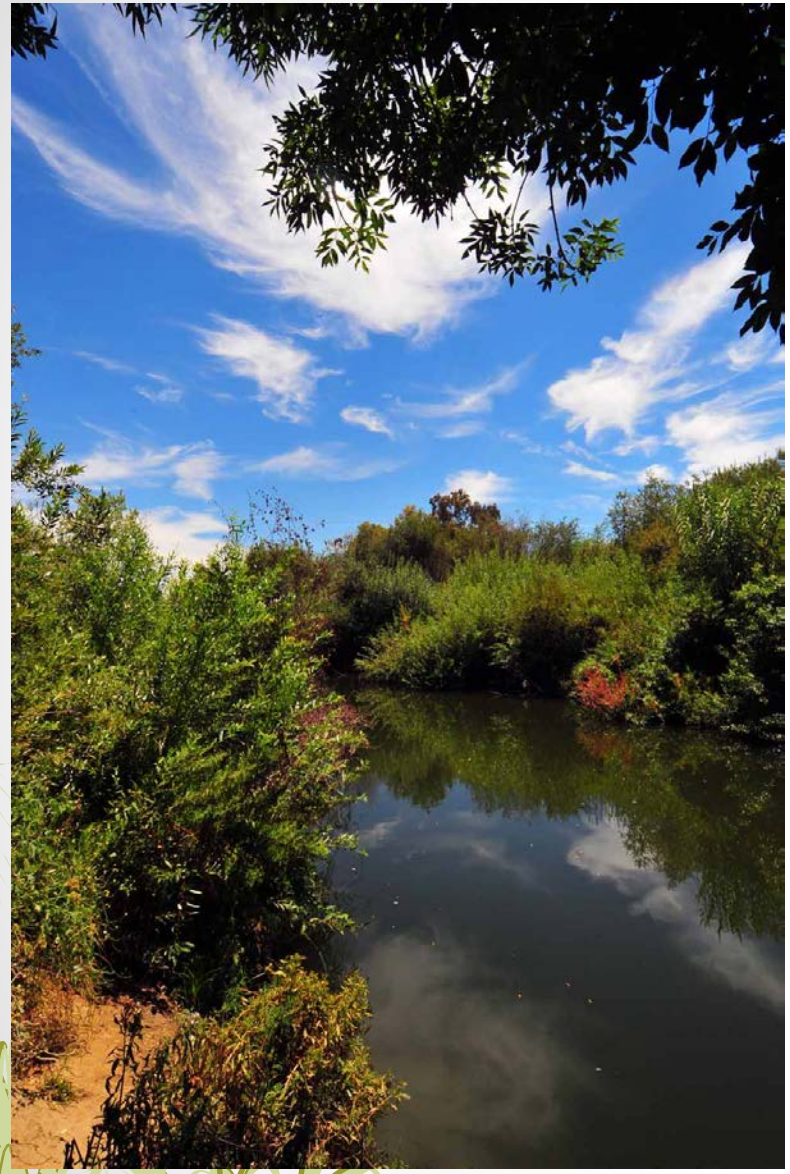
Concrete-Lined Channel

- A thriving avian community is supported by phytoplankton, microorganisms, and vegetation when the low-flow channel overtops its banks.
- Avian foraging habitat may well be reduced by small changes in discharge. Modification may lead to a significant reduction in the extent of shallow water sheet-flow during the dry weather conditions.
- Algae temperature requirements may be exceeded if flows are reduced.

(Algae, Phytoplankton and Chlorophyll." Fundamentals of Environmental Measurements. 22 Oct. 2014)

Los Angeles River at Glendale Narrows

Los Angeles River at Sepulveda Basin



What is CDFW Concerned About?

Fish:

steelhead trout
Pacific lamprey
threespine stickleback
Santa Ana sucker
speckled dace
California killifish
arroyo chub

Birds:

Over 300 species of birds are found along the Los Angeles River.

Willow riparian habitat for least Bell's vireo.

Birds feed on:

phytoplankton
fish
insects
aquatic invertebrates.

Plants:

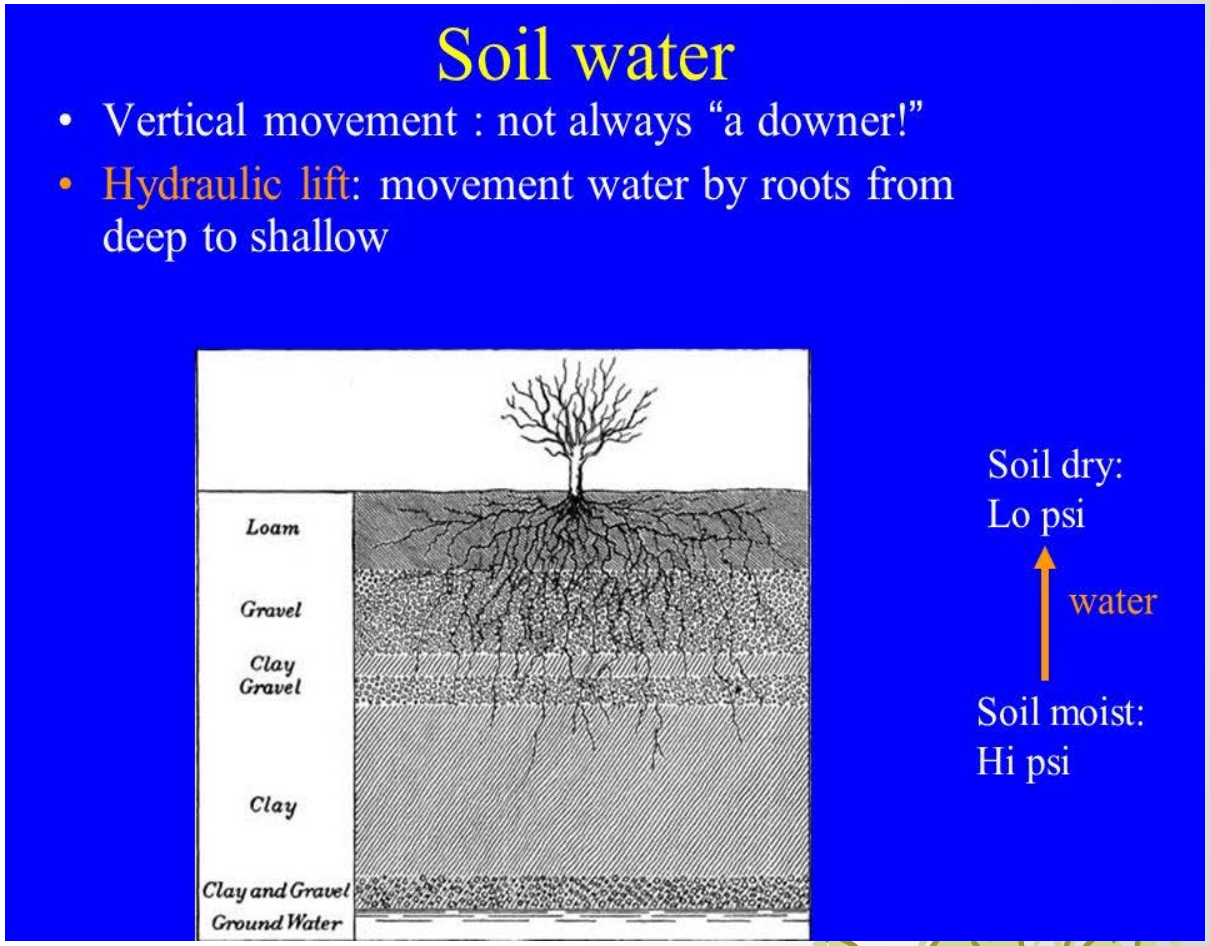
Rely on surface and groundwater flow.

Riparian plant communities include:

oak woodland
walnut woodland
willow woodlands
sycamore woodlands
cottonwood woodlands
emergent wetland vegetation.

Ground/Surface Water Plant Interaction

- Plants use different sources of water during different times.
- Wetland and riparian habitats are supported by both surface and groundwater (Winter 1999).
- To establish themselves, seedlings need surface flows during the growing season.
- Roots redistribute surface and groundwater soil moisture to dry soil to help maintain riparian understory.
- Riparian areas may shift from native-dominated phreatophytes to non-native species as groundwater is depleted and, timing and magnitude of flow is altered. (Stromberg, et. al, 2007, Merritt and Poff 2010).



Example of Why Plants Need Surface Flow

Stable Isotope Methods Findings

- Study determined that *Populus* seedlings along the Yampa River were using surface water during the summer for a minimum of 2 to 3 years.
- Older trees primarily use groundwater, although much older trees (>90 years old) used both soil and groundwater.
- This investigation identified that seedlings were not phreatophytes. Survival was not dependent upon growing a taproot fast enough to remain connected to the declining summer water table. Surface flows are necessary for survival.

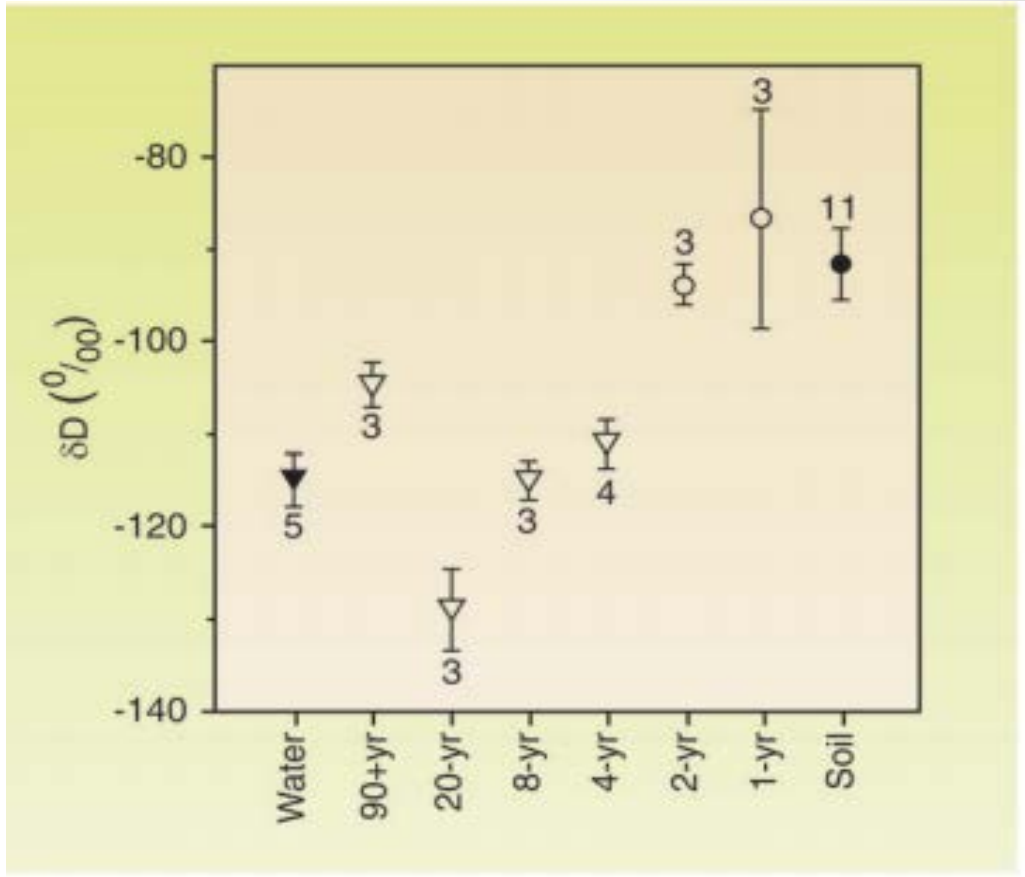


Figure 3-7. Sap water δD of groundwater (water); plants of 90+, 20-8-, 4-, 2-, and 1-year old cottonwoods; and soil water, illustrating tha younger plants used primarily soil water.

Cooper, David J.; Merritt, David M. 2012. Assessing the water needs of riparian and wetland vegetation in the western United States. Gen. Tech. Rep. RMRS-GTR-282. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 125 p.

questions..

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