# CALIFORNIA DEPARTMENT OF FISH and WILDLIFE

#### GOALS

1. By 2025, the area of protected riparian habitat increases by 2%

2. By 2025, establish a flow regime that is sufficient to support existing and future desirable habitat condition.

3. By 2025, establish buffers between agriculture activities and river corridors

4. By 2025, identify and fill gaps in riparian vegetation along major rivers

5. By 2025, increase the amount of riparian habitat in the ecoregion by 20,000 acres over ten years.

6. By 2025, plan and implement direct management, eradication, or adaptive management of invasive species to optimize native habitats.

7. By 2025, begin moving away from sheet irrigation and tile drains in SJ valley

8. By 2025, treat invasive species on CDFW lands



# California State Wildlife Action Plan Update 2015 Great Valley Ecoregion DRAFT STRATEGY: Great Valley Riparian

The State Wildlife Action Plan examines the health of wildlife and prescribes actions to conserve wildlife and vital habitat before they become more rare and more costly to protect. The plan also promotes wildlife conservation while furthering responsible development and addressing the needs of a growing human population.

### SENSITIVE SPECIES

Giant garter snake Yellow billed-cuckoo Swainson's hawk **Bank swallow** Golden eagle Ringtail Bewick's wren Black-crowned night heron Broad-footed mole California giant salamander California quail Common ensantina Common yellowthroat Deer mouse Foothill yellow-legged frog Fringe myotis Gopher snake Great blue heron Great egret Hutton's vireo Long-eared myotis Long-eared owl Mountain lion Northern river otter Osprey Ringneck snake Song sparrow Spotted towhee Tricolored blackbird Western mastiff bat Western pond turtle Western skink Western small-footed myotis Western spotted skunk Yellow warbler Yellow-breasted chat Porcupine Riparian woodrat Greater white-front goose Valley elderberry longhorned beetle Bald eagle Red-legged frog





California quail. H. Vannoy Davis © California Academy of Sciences



Foothill yellow-legged frog © 2004 Pierre Fidenci





Western pond turtle © 2003 Pierre Fidenci



of Sciences.

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#### ENVIRONMENTAL STRESSES

Change in annual average temperatures

Change in Annual average precipitation

Change in snow pack Change in snow cover period

Changes in sediment erosiondeposition regime

Changes in natural fire regime

Changes in extreme events

Change in pollutants

Changes in soil chemistry

Change in runoff and river flow

Changes in water levels and hydroperiod

Change in flood occurrence, frequency, intensity, and area flooded (including hydroperiod)

Loss or change in biotic interactions (altered community dynamics)

Changes in functional processes of ecosystem

Changes succession processes and ecosystem development

Habitat fragmentation

Change in water pollutants

Change is water temperature

Dusky-footed woodrat © 2010 Rob Schell



Organization CDFW-R2 FWS CDFW-R4 CDFW-R4 Central Valley Joint Venture













## HUMAN RELATED IMPACTS

- Roads and railroads
- Utility & service lines
- **Recreational activities**
- Housing and urban areas
- Dams & water management/use
- Invasive plants/animals
- Annual & perennial nontimber crops
- Livestock farming & ranching

- a. Objectives i. Ensure riparian habitats are included in the development of valley floor HCP

- a. Objectives
- iv.Inform public of grazing BMP and wildlife friendly land use policy b. Activities
- 4. Conduct research a. Objectives
  - ii. Provide adequate data necessary for the water flow best management. b. Activities i. Identify study questions, develop study design
- 5. Manage water flows a. Objectives

Team Lead Team Member Team Member Team Member Team Member





#### STRATEGIES, OBJECTIVES AND ACTIVITIES

- 1. Develop and implement HCP/NCCP
  - ii. Ensure riparian habitat is covered in BDCP
  - iii.Advocate for wildlife
  - iv.FERC re-license process streamlined and includes conditions support ecosystem conservation
  - v.Ensure projects identified in the HCPs/NCCPs are compatible to ecosystem conservation.
- b. Activities
  - i. Coordinate with stakeholders
  - ii. Obtain funding for implementation and staffing
- iii.Provide funding grants for coordination and feasibility study
- 2. Effective Law Enforcement a. Objectives
  - i. Compliance with water rights and F&G Code 1600 agreements
  - ii. Reduced illegal diversions
  - iii.Increase LED staffing levels
  - b. Activities
    - i. Include BMPs as enforceable condition of SAA and water right permit/license
    - ii. Advocate for opportunities to improve prosecutions of environmental laws and illegal diversions
    - iii.Identify partners to improve enforcement capabilities
    - iv.Evaluate and increase LED staffing levels
    - v.Obtain funding for implementation and staffing
- 3. Provide Education & Outreach
  - i. Educate private landowners on invasive species identification and management
  - ii. Raise public awareness of the values of riparian habitats
  - iii.Recruit public participation in monitoring invasive species and rapid response
  - i. Develop goals and objectives, core message
  - ii. Identify target audience
  - iii.Develop program for the general public, and partnering agencies/organizations
  - iv.Conduct public training workshops
  - v.Obtain funding for implementation and staffing

  - i. Provide adequate data necessary for the development of invasive species and grazing BMPs
  - ii. Conduct literature review, coordinate with experts
  - iii.Obtain funding for implementation and staffing
  - i. Restore critical flow dynamics to benefit riparian ecosystem function b. Activities
    - i. Obtain funding for implementation and staffing
  - ii. Coordinate with State, Federal, counties and local water districts
  - iii.Coordinate with Floodsafe and local flood agencies
  - iv.Identify and prioritize critical streams to restore flow dynamics v.Conduct assessment of needed flows
  - vi.Assess opportunities for dam removal on smaller streams
  - vii.Identify working groups focused on flow and ecological function
  - viii.Identify and review existing local groundwater policies to inform future policy recommendations
  - ix.Encourage setback levees to restore hydrological and geomorphic function.