

Preserve the Pacific Flyway in Drought



© BOR

California's drought threatens to decimate long-term public investments in Pacific Flyway recovery. The drying-up of agricultural habitat places overwhelming pressure on our public and private refuges to provide food resources and nesting habitat for millions of birds and other species.

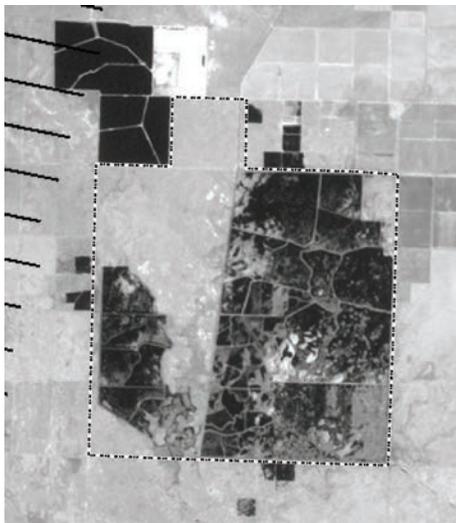
Yet this year, Central Valley refuges may receive less than half of their water needs for the second straight year, resulting in damaging long-term impacts to established habitat and public

investments. Significant numbers of birds may face death or reduced breeding success due to disease or malnourishment. Impacts may be felt for years to come.

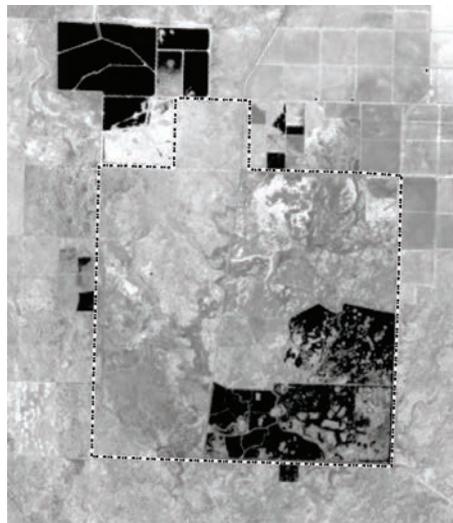
Unquestionably, our farms and communities are suffering during this drought. So, too, are migratory birds, resident waterfowl, and other wetland wildlife. These species have no insurance policy to recover from the significant loss of habitat they could suffer this year. Action must be taken to provide a safety net of wetland habitat to protect years of investments in the public trust, international commitments along the Pacific Flyway, and the natural heritage that enhances the economy and quality of life in many communities.

Actions needed

- **Water supplies for public and private wetlands:** Legal commitments to refuge water contracts should not be compromised, especially in drought years when less incidental habitat is available across the Central Valley.
- **Multi-benefit drought-response projects:** Build environmental benefits into drought management activities and prioritize public resources for actions that yield multiple benefits.
- **Landowner incentives:** Enhance fallowed farmland for birds and wildlife through landowner incentives to provide habitat. For example, cover crops can provide critically important waterfowl nesting habitat with minimal precipitation and little to no irrigation.
- **Efficiency investments:** Fund wetland management equipment and operations that maximize existing water supplies.
- **Water for fall migration:** Assure water will be conserved in the system for delivery to wetlands in fall, when needed most by refuges for millions of arriving birds, and provide essential summer deliveries to preserve soil productivity and prevent loss of established wetland plants.
- **Real-time adaptive management:** Fund short-term monitoring of drought-related bird impacts so wetland managers can respond to changing conditions on the ground and minimize disease outbreaks from overcrowding and inadequate fresh-water flow.
- **Long-term monitoring:** Fund long-term monitoring programs to gauge population impacts and responses so better systemic drought preparation and response policy can be developed.



January 18, 2012 (source: Landsat ETM+)



January 2, 2015 (source: Landsat OLI)

Landsat images of 11,249-acre Kern National Wildlife Refuge comparing flooded acreage (dark areas) in Jan 2012 (100% water needs delivered) vs Jan 2015 (26% water needs delivered)

