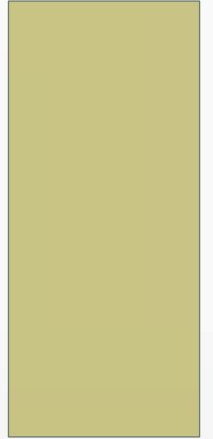


California Hatchery Review Project

Recovering, Conserving & Sustaining
California's Salmon & Steelhead Fisheries



What is in the Final Report?

Purpose and Scope

Context

Issues of Greatest Importance

Statewide Recommendations and Standards

Program Recommendations

Implementation and Research



What was the purpose of the California Hatchery Review?

Make Recommendations to:

- Improve hatchery efficiency
- Support commercial, tribal, and recreational fisheries
- Reduce the impact of hatchery operations on natural populations



Context

Two large systems – KT and CV

Both have listed and non-listed stocks

Both have degraded habitat and large dams

Both have large mitigation hatcheries

Both have commercial and recreational fisheries

KT has terminal tribal fisheries, CV does not



Context

Literal view of segregation re: programs

70 percent brood harvest rate may be too high
for naturally spawning fish in CV

No mark-selective salmon fisheries in CA



Issues of Greatest Importance

14 issues with the greatest for management
Context in Chapter 2 vital to understanding

Habitat Degradation

Monitoring and
Evaluation

Marking and Tagging

Program Goals

Program Size
Independent of
Impacts

Fish Health

Program Purpose

Offsite Releases

Populations and
Boundaries



Issues of Greatest Importance

14 issues with the greatest for management
Context in Chapter 2 vital to understanding

Harvest Should
Account for Natural
Spawners

Exclude Yearling
Releases from
Broodstock

Separation of Runs of
Hatcheries

Underperforming
Steelhead Programs

1:1 Matings



Statewide Recommendations

Broodstock Management

Program Size and Release

Incubation Rearing and Fish Health

Monitoring and Evaluation

Effects on Habitats and Organisms

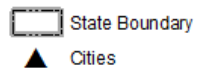


Hatchery Program Recommendations

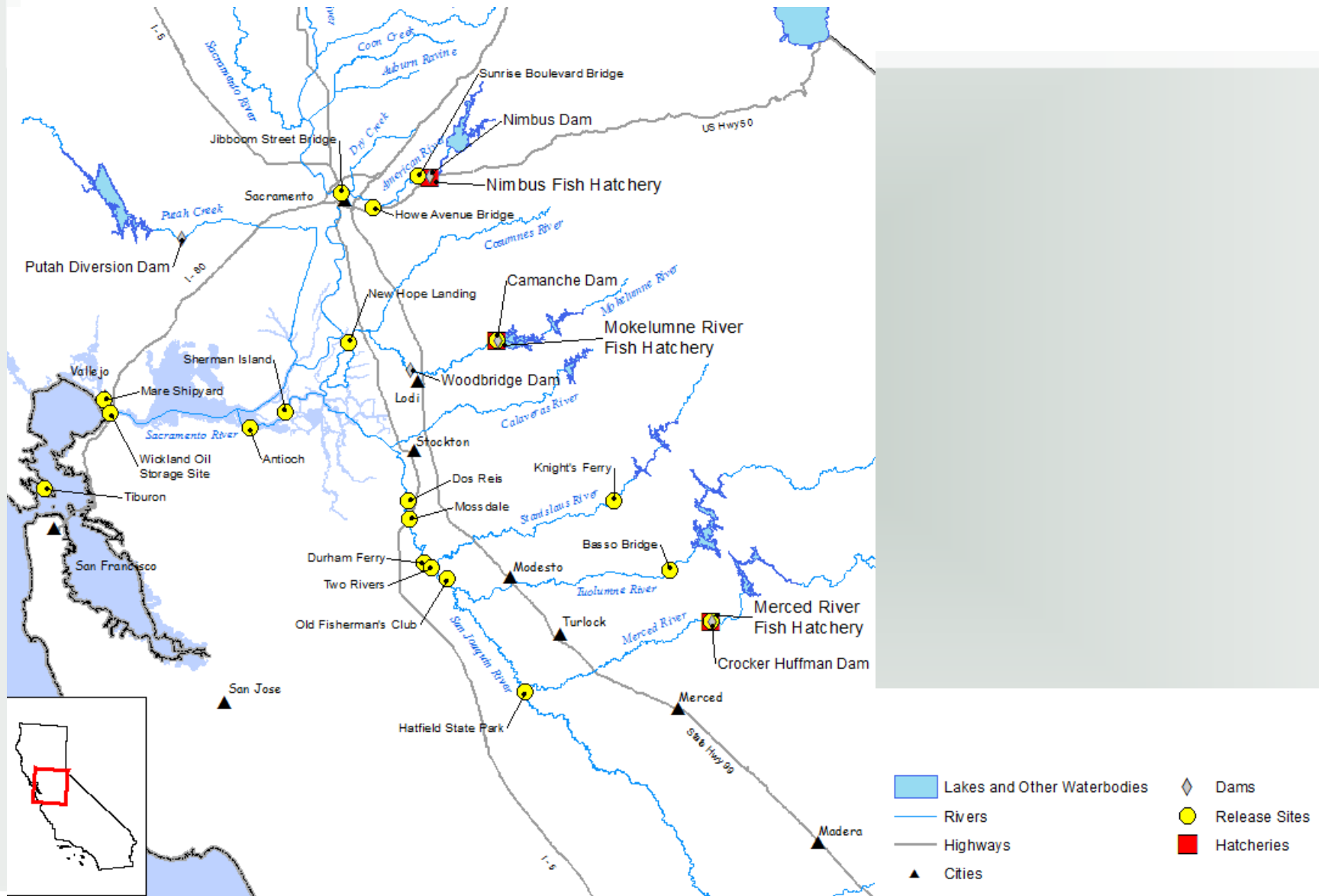
Information gathered through site visits and
Hatchery Program Viewer (HPV)

120 Recommendations for 19 Programs

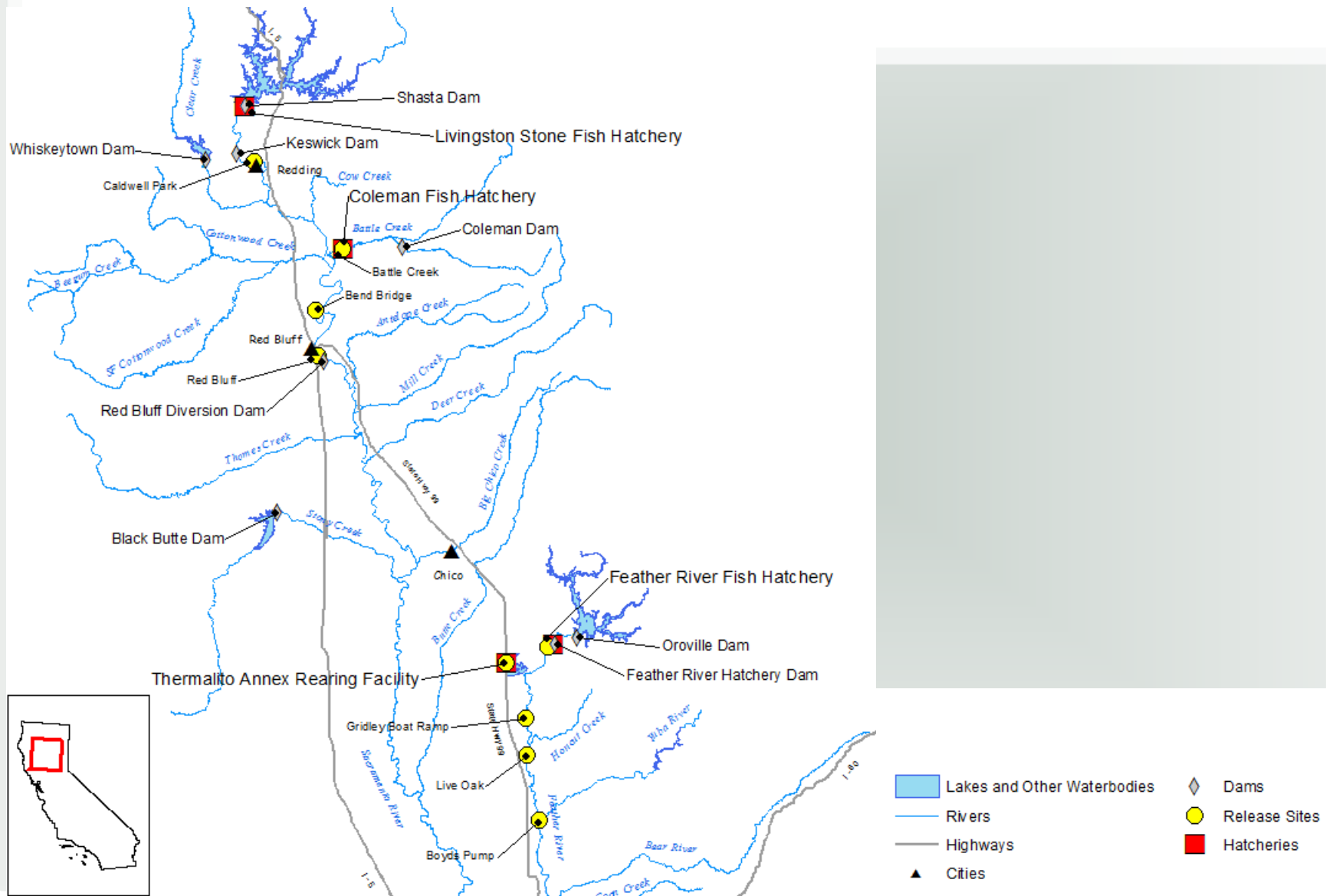


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Central Valley South Region



Central Valley North Region



Hatchery Program Recommendations

Information gathered through site visits and
Hatchery Program Viewer (HPV)

120 Recommendations for 19 Programs



Implementation

Regular Performance Reviews by HCTs – both
Programmatic and Regional every 10 yrs

Complete HGMPs

Staff with Expertise should address Technical
problems

Detailed Standardized Monitoring



Implementation

Review Coastal Hatcheries

Find Permanent Host for Publicly Accessible
Website



Research

Population Identification and Delineation

Relative Reproductive Success

Effects of Hatchery Fish on Natural Populations

Development of Anadromy in *O. mykiss*

Parentage Based Tagging



Research

Long-term Changes to Natural Population
Productivity

Decline in Steelhead Program Anadromy

Domestication of Natural and Hatchery Pops

Carrying Capacity and Production Goals

Effects of Mating Protocols on Age Distribution



www.CAhatcheryreview.com



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