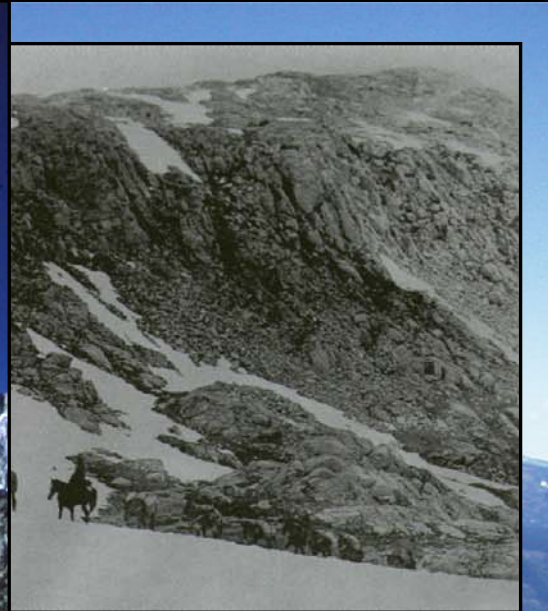


An aerial photograph of a mountain lake system in the Sierra Nevada. The image shows several interconnected blue lakes nestled in a valley between rugged, rocky mountains. Patches of snow are visible on the slopes and in the higher elevations. The terrain is a mix of brownish-yellow earth and green vegetation.

Sierra Nevada Fisheries & Ecosystem Management

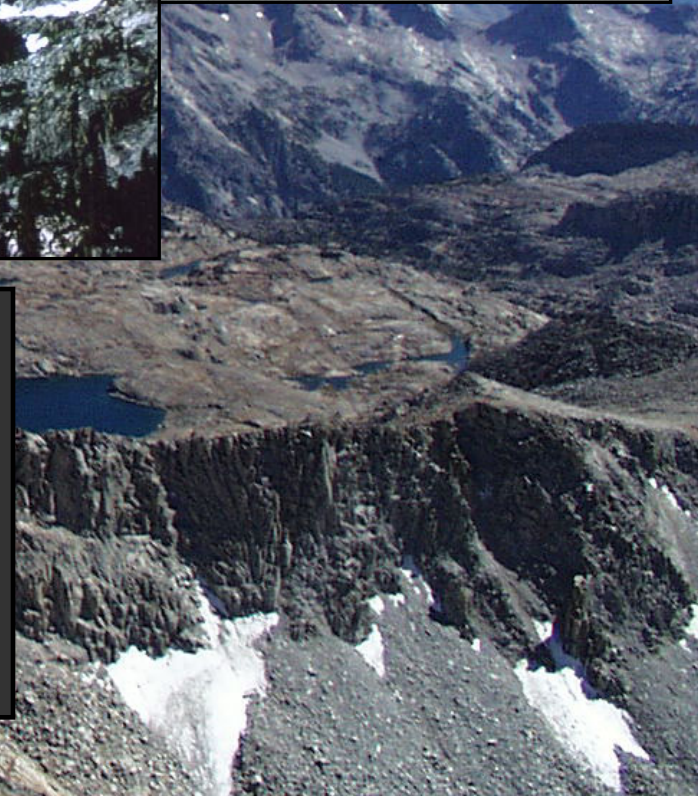
*Curtis Milliron,
California Department of Fish and Game*





History of High Country Management

Animal Stocking
Aerial Stocking





17% of all surveyed lakes and unmapped ponds contained at least one salmonid species (1,712 / 9,863).

1,059 sites with brook trout

655 sites with rainbow trout

353 sites with golden trout

79 sites with brown trout

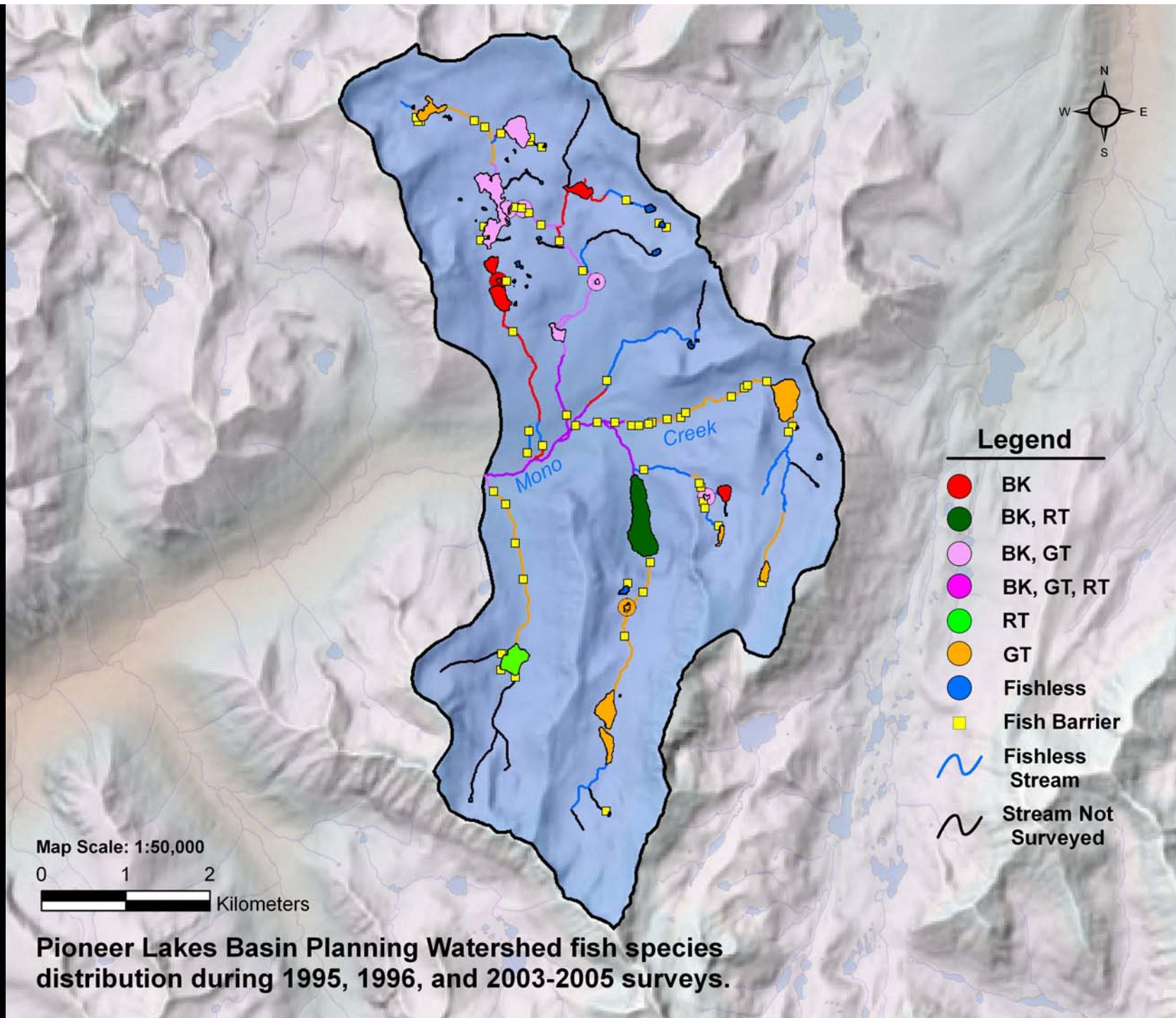
40 sites with cutthroat trout

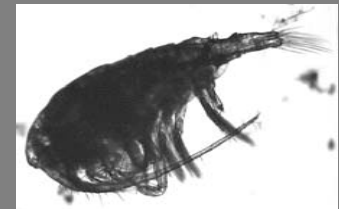
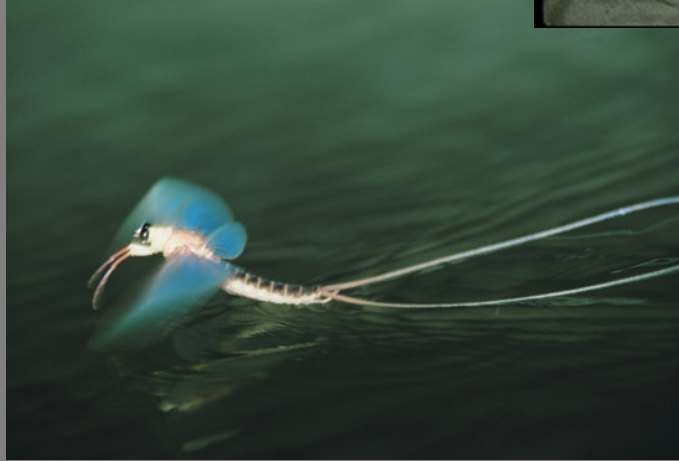
**Fish survey results for
lakes and unmapped ponds
(2007)**



89% of lakes larger than 2.5 hectares
and deeper than 3 meters have trout










**yellow-legged frog
reproduction in Bishop Cr.**

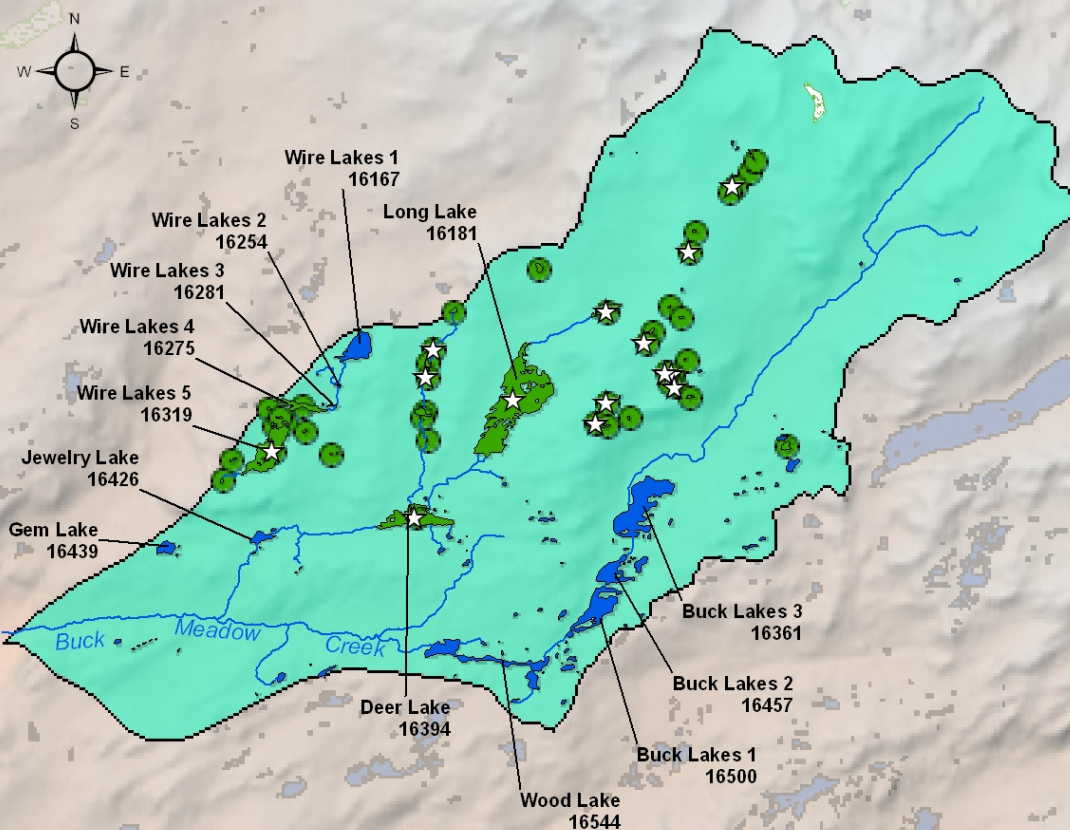


To manage California's diverse fish, wildlife, and
plant resources, and the habitats upon which they
depend...

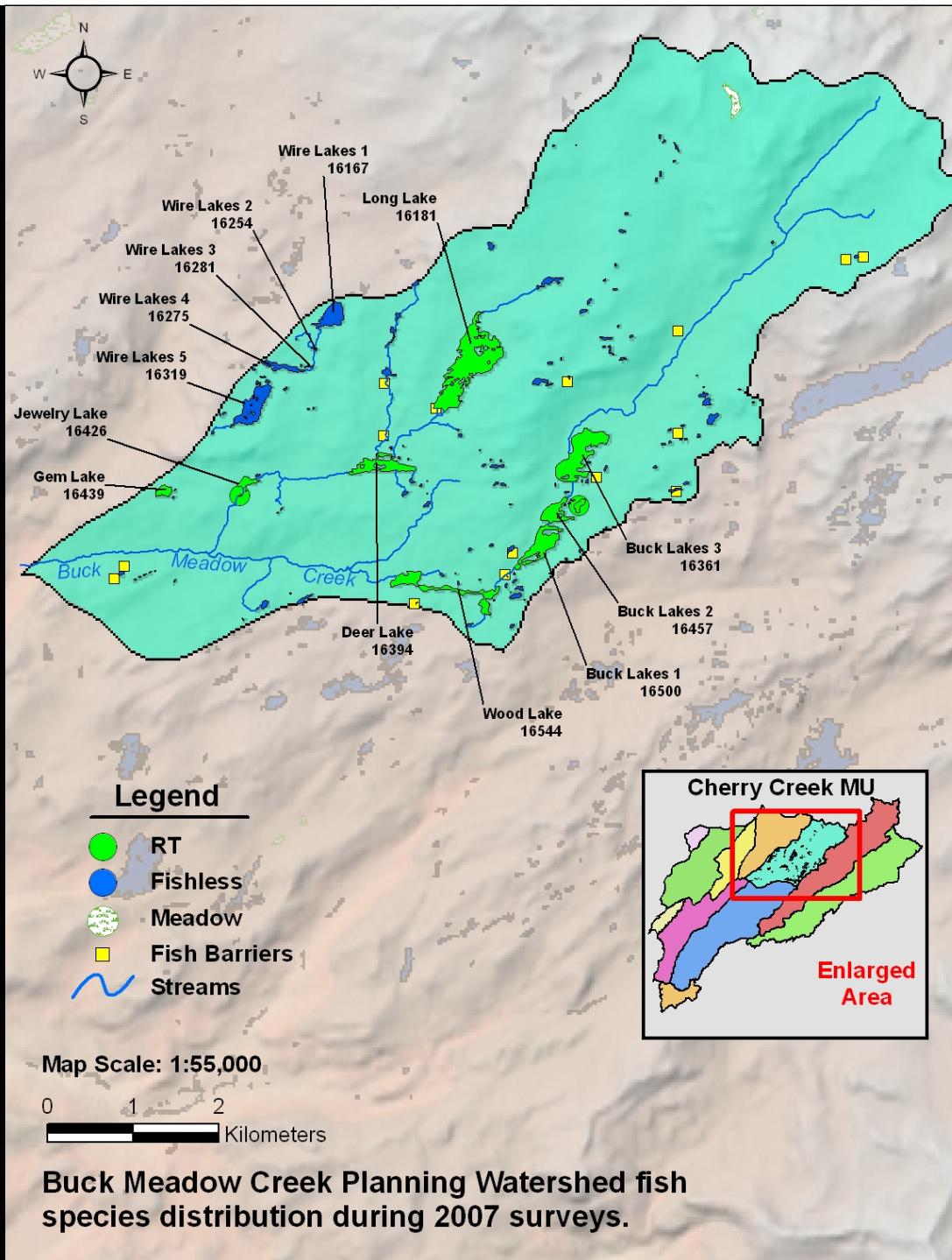
for their ecological values,

and for their use and enjoyment by
the public

CDFG Mission Statement



Buck Meadow Creek Planning Watershed
Rana sierrae distribution during 2007 surveys.



Browse



Layout:

HML Data ▾



Record:

1

Found:

56

Total:

14588

Unsorted

High Mountain Lakes Database

Browse Data

Topo Map

Export Data

Print Preview

Show All Records

Show Omitted

Enter Find Mode

Perform Find

Constrain Set

Extend Set



Species Data

Habitat Data

Stocking Data

Images

Watershed Maps

Reports

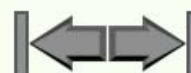
Treasure Lake #6
20830.00

WaterType: lake
 Seasonality: perennial
 Elevation: 3,402 (m)
 Lake Area: 0.81 (ha)
 Perimeter: 356 (m)
 Max Depth: 7.0 (m)

Visits: N
 Region: 6
 County: Inyo
 Mgmt Unit: Bishop Creek
 Watershed: South Lake
 Mgmt Direction: Native species restoration -
 Category 1; Completed 2003

Record: 1

Total: 56



Sort Records

Count Unique Sites

Survey Type: baseline

Weather: overcast

Sampled: n/a

Wind: light

Survey Date: 8/8/2001

Air Temp: 23 celsius

Herpetofauna

Survey Method: visual

VES Time: 45 (min)

Species	Adults	Subs.	Meta.	Larvae	Egg	
					Masses	Diseased
RAMU	2	0	0	21	0	0

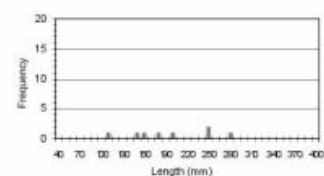
Fish

Survey Method: Net

Nets: 1 Net Hours: 16.0

Species	#	Avg. Length	Avg. Weight	Avg. K value	CPUE	SS
GT	8	202	108	1.058	0.50	ss

Golden Trout

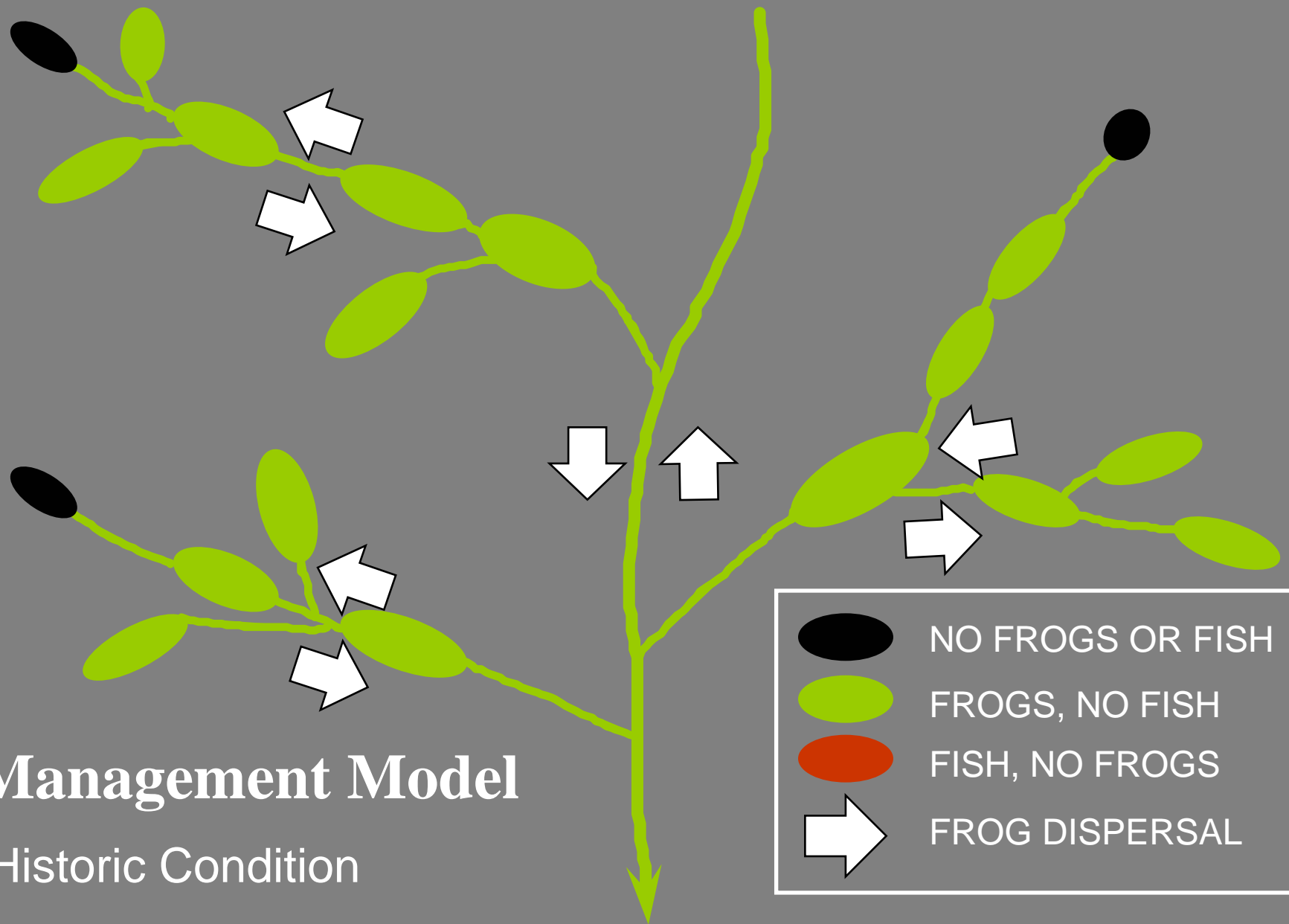


Plan Objectives

- “Manage wilderness lakes in a manner which maintains or restores native biodiversity and habitat quality, will support viable populations of native species, and provides for recreational opportunities considering historical use patterns...”
- Trout stocking provisions

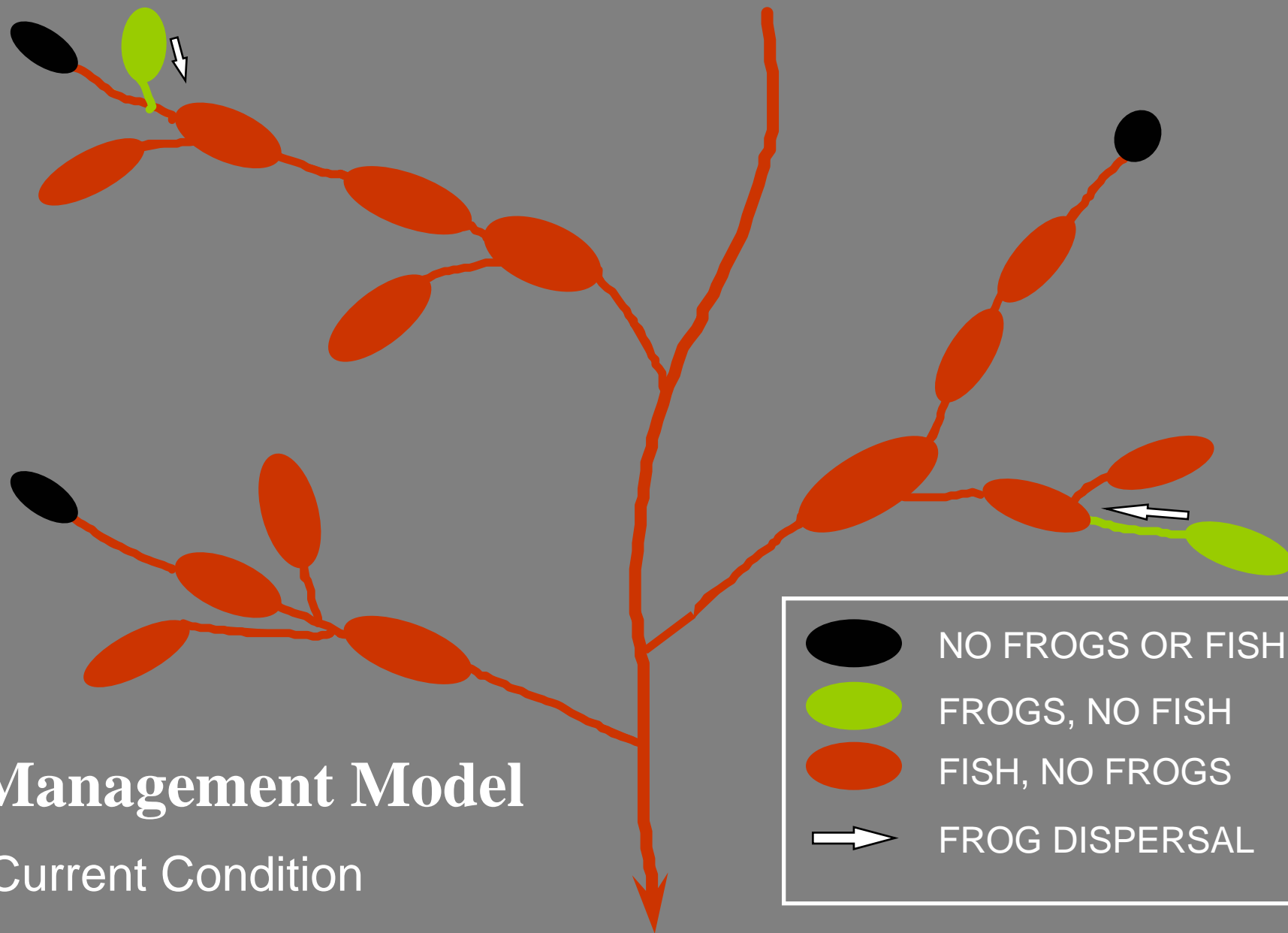
Management Model

Historic Condition



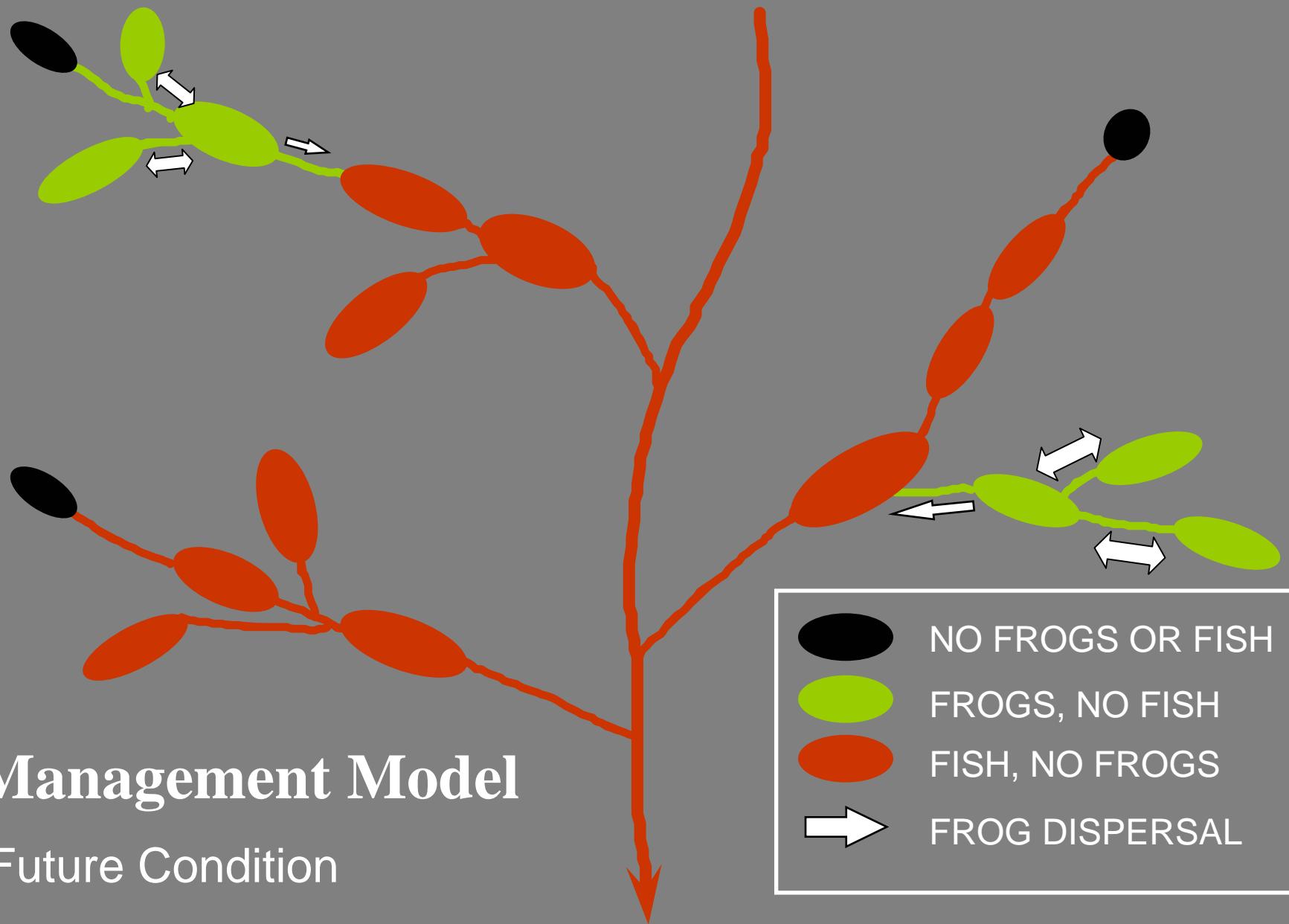
Management Model

Current Condition



Management Model

Future Condition



Browse



Layout:

HML Data ▾



Record:

1

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Total:

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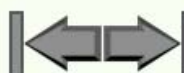
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Lake Area: 0.81 (ha)
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Visits: N
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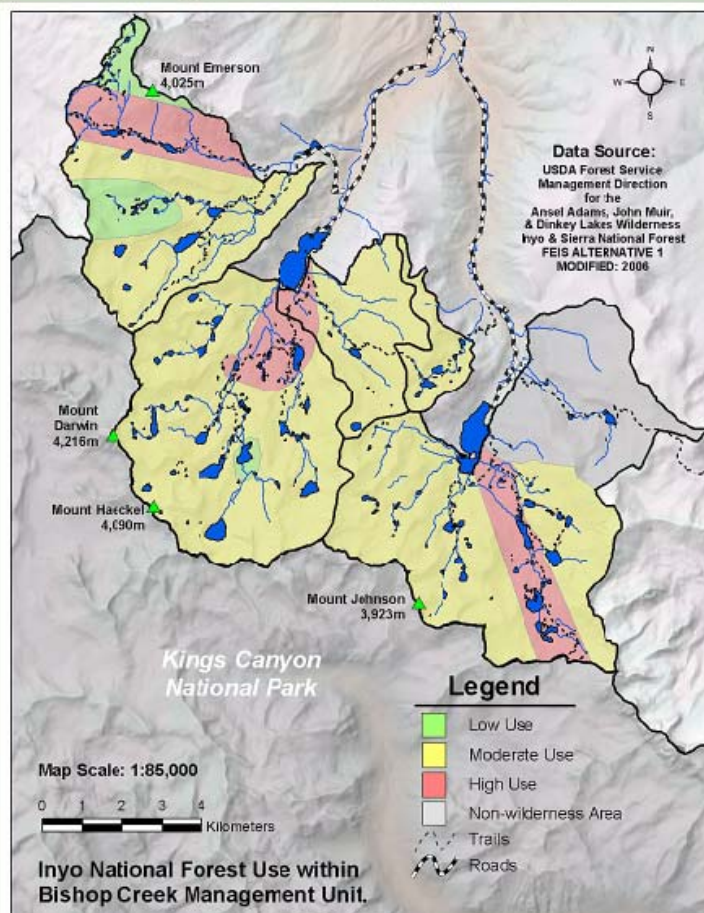
Mgmt Direction

Fish Distribution

Herp Distribution

Lake IDs

Use



Browse



Layout:

HML Data ▾



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1

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Habitat Data

Stocking Data

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Reports

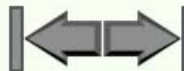
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20830.00

WaterType: lake
Seasonality: perennial
Elevation: 3,402 (m)
Lake Area: 0.81 (ha)
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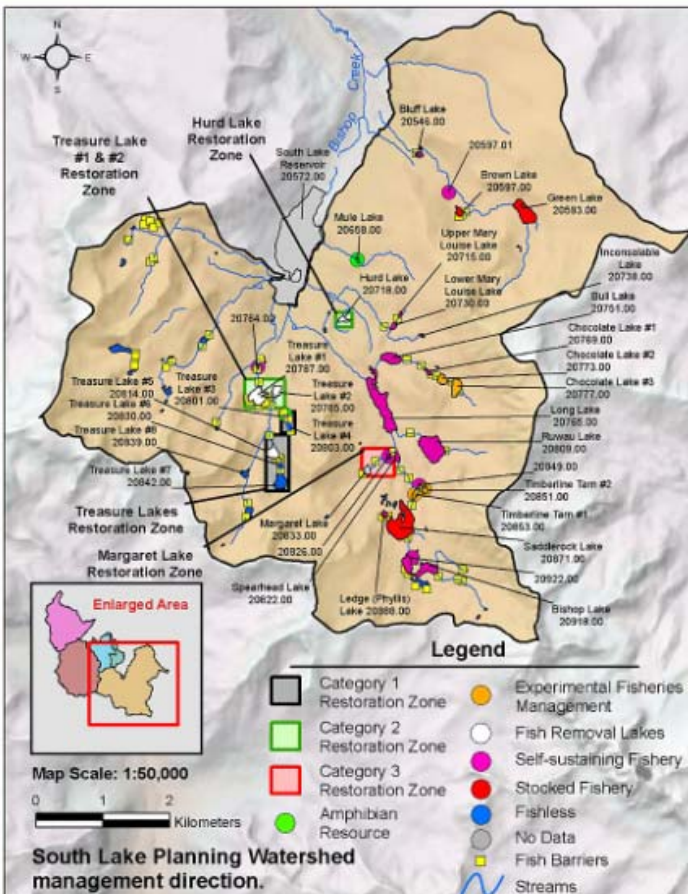
Mgmt Direction

Fish Distribution

Herp Distribution

Lake IDs

Use



Browse



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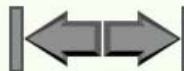
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WaterType: lake
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Record: 1

Total: 56



Sort Records

Count Unique Sites

Fishery Summary

Herpetofauna Summary

Monitoring Summary

Monitoring prescription for lakes in the Bishop Creek Management Unit.

Lake Name	Lake ID	Monitoring Category	Monitoring Prescription	Management Direction
Spearhead Lake	20822.00	Self-sustaining or stocked fisheries with no change in management	Survey every 20 years.	Self-sustaining fishery
T3 spring	20801.01	Amphibian resource with Species of Special Concern	Survey every 3 years for the first 9-year period, then every 5 years thereafter.	Amphibian resource
Timberline Tarn #1	20853.00	Experimental fisheries management	Survey every year for the first 5 year period, every 3 years for next 9 year period, and every 15 years thereafter or for as long as experimental fish	Experimental fisheries management
Timberline Tarn #2	20851.00	Experimental fisheries management	Survey every year for the first 5 year period, every 3 years for next 9 year period, and every 15 years thereafter or for as long as experimental fish	Experimental fisheries management
Treasure Lake #1	20787.00	Native Species Restoration	When implemented, survey every year for the duration of the native species restoration project.	Native species restoration - Category 2
Treasure Lake #2	20785.00	Native Species Restoration	When implemented, survey every year for the duration of the native species restoration project.	Native species restoration - Category 2
Treasure Lake #3	20801.00	Native Species Restoration	When implemented, survey every year for the duration of the native species restoration project.	Native species restoration - Category 1; Completed 2003
Treasure Lake #4	20803.00	Native Species Restoration	When implemented, survey every year for the duration of the native species restoration project.	Native species restoration - Category 1; Completed 2003
Treasure Lake #5	20814.00	Native Species Restoration	When implemented, survey every year for the duration of the native species restoration project.	Native species restoration - Category 1
Treasure Lake #5.5	20830.01	Native Species Restoration	When implemented, survey every year for the duration of the native species restoration project.	Native species restoration - Category 1
Treasure Lake #6	20830.00	Native Species Restoration	When implemented, survey every year for the duration of the native species restoration project.	Native species restoration - Category 1; Completed 2003
Treasure Lake #7	20842.00	No active management	Survey every 30 years.	Not actively managed or management unknown
Treasure Lake #8	20839.00	No active management	Survey every 30 years.	Not actively managed or management unknown
Treasure Lake #9	20878.00	No active management	Survey every 30 years.	Not actively managed or management unknown

Species Data

Habitat Data

Stocking Data

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Reports

Why management plans?

- Facilitates landscape scale (watershed) approach vs. ad hoc lake-by-lake
- Focuses on restoration networks
- Enables balanced management between native fauna and historic recreation
- Standardizes Department approach across regional boundaries

- Provides quick reference
(stocking and monitoring schedules, current and past management)
- Aids in communications with agency personnel and public
- Meets Department's Strategic Plan goal of "emphasizing multi-species planning, analysis, and management for large aquatic and terrestrial ecosystems"





Fisheries Management

Aerial Stocking



Fisheries Management

Experimental Stocking

- Region 6

3,134 primarily lakes and ponds included in 22 basin management plans

- Larger lakes have fish

- ~90% (290 of 336) lakes \geq 2.5ha (7.5 acres) and \geq 3m deep

- 479 lakes with self-sustaining fisheries

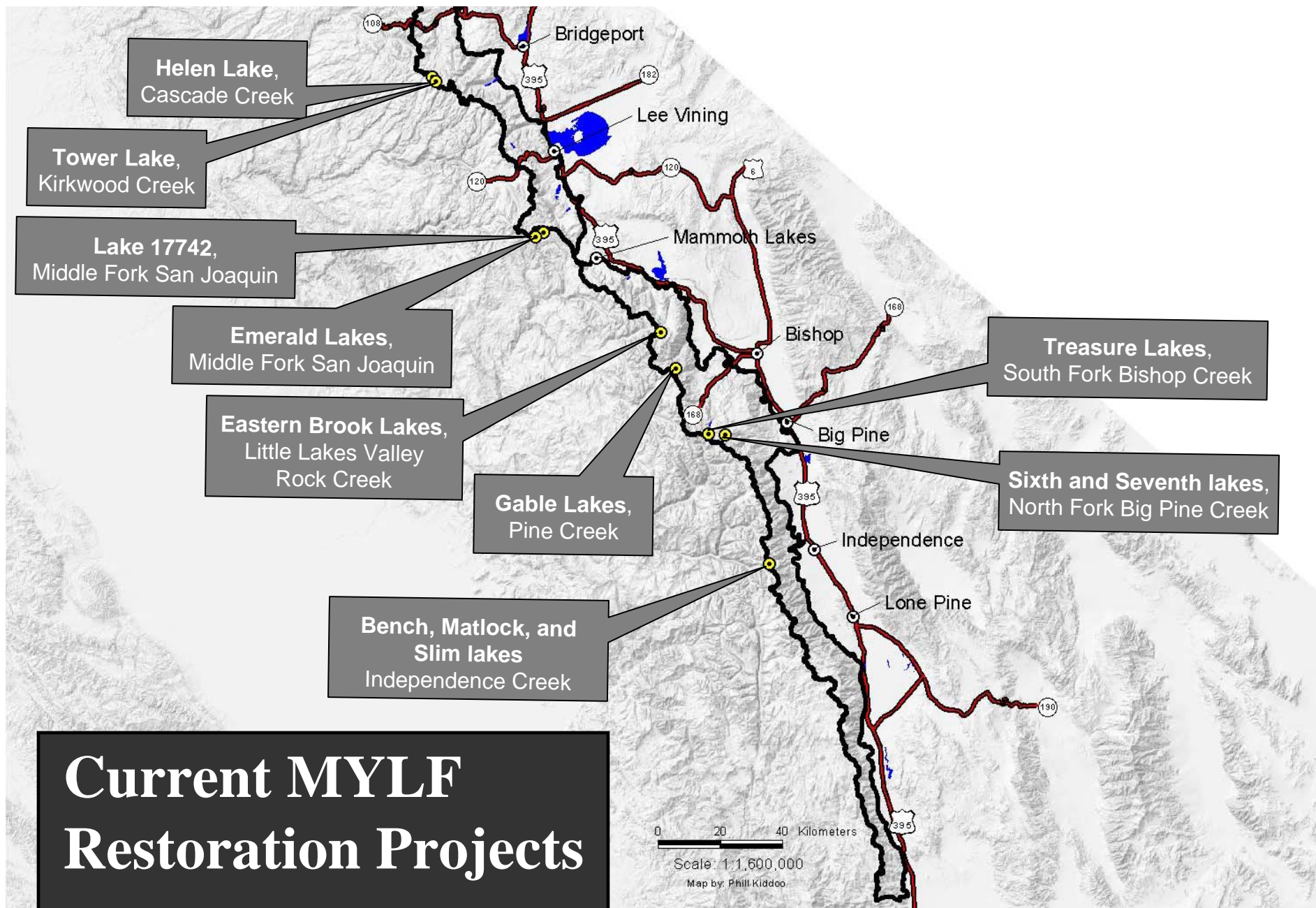
- 79 lakes are stocked with GT, RT, or CT-L

- 37 of which also have self-sustaining BK
 - Quality based



- Region 6
 - 281 proposed native fauna restoration waters
 - Category 1 = 188
 - Category 2 = 79
 - Category 3 = 14

28 with MYLF are already made fishless, or in process
 - 540 waters managed as “Amphibian Resource”
 - 270 waters with *Rana sierrae*; 170 have reproduction – represents ~ 45 populations

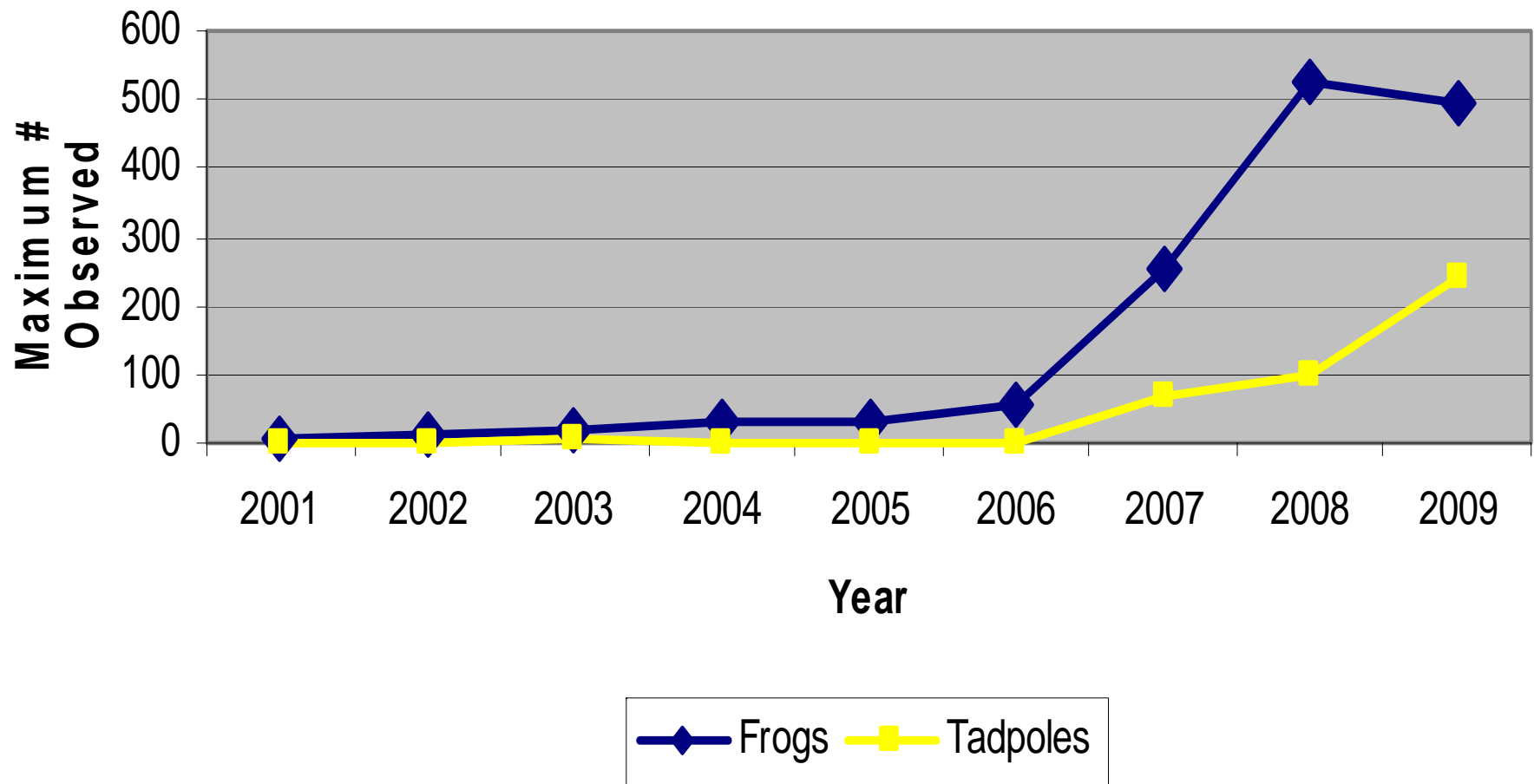








Maximum # of Mountain Yellow-legged Frogs Observed at Matlock, Bench, and Slim Lakes by Year



DRAFT

**HATCHERY AND STOCKING PROGRAM
ENVIRONMENTAL IMPACT REPORT/
ENVIRONMENTAL IMPACT STATEMENT**

STATE CLEARINGHOUSE #2008082025

PREPARED FOR:

California Department of Fish and Game
830 S Street,
Sacramento, CA 95814
Contact: Jim Starr

and

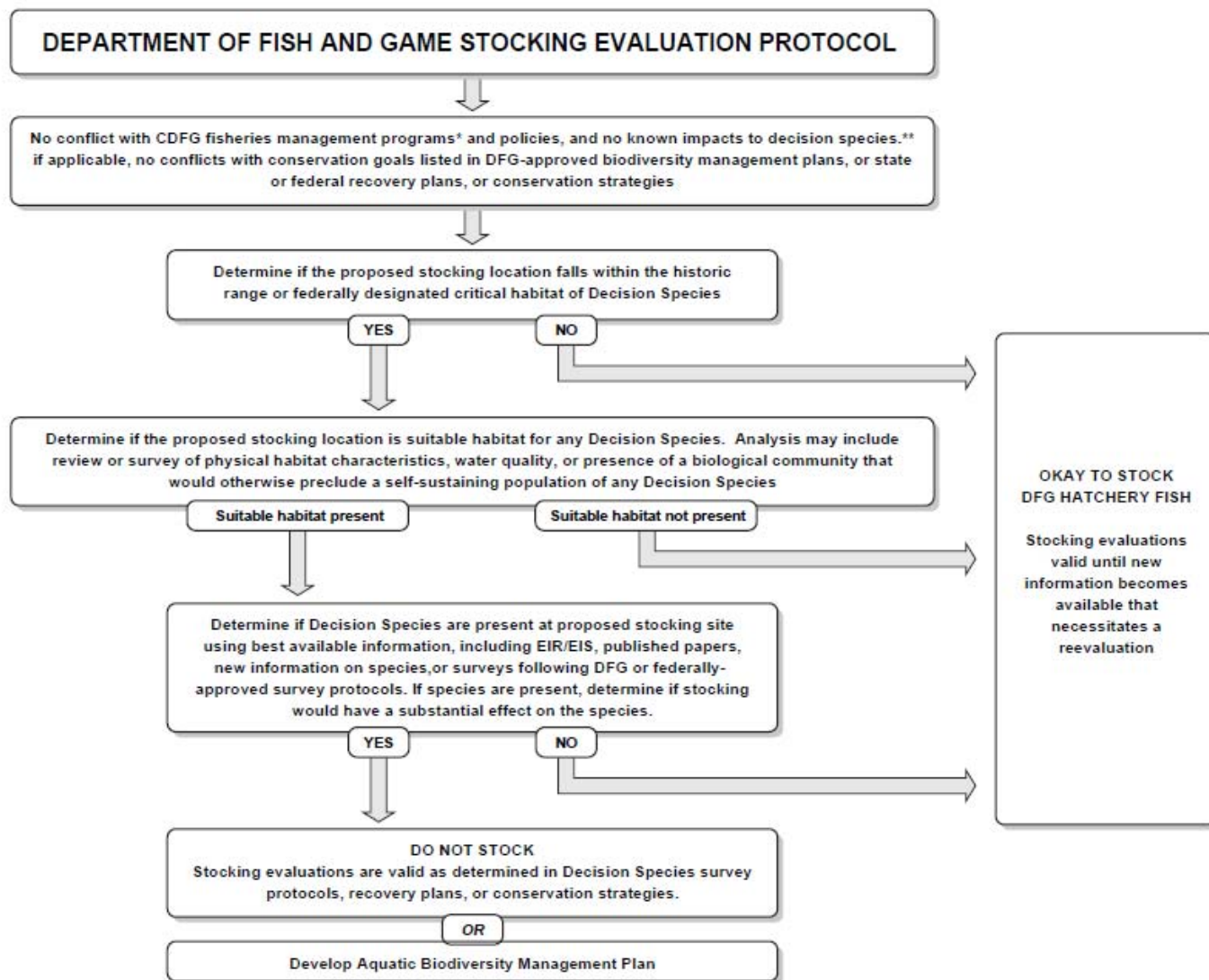
U.S. Fish and Wildlife Service
2800 Cottage Way, Room W-2606
Sacramento, CA 95825
Contact: Bart Prose

PREPARED BY:

ICF Jones & Stokes
630 K Street, Suite 400, Sacramento, CA 95814
Contact: Mike Rushton
(916) 737-3000

September 2009





* See Title 14: 238.5(d)(3)

**Decision species are defined in Chapter 4 of the DFG Hatchery EIR/EIS

Figure K-1
DFG Trout and Inland Salmon Stocking Evaluation Protocol

