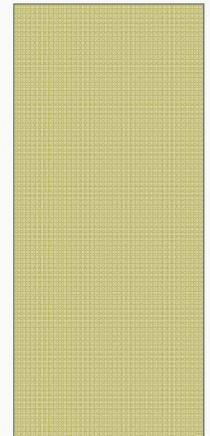


# WATERSHED MANAGEMENT ON THE CLEVELAND NF

USDA FOREST SERVICE





# AGENDA

- Overview
- Land Management Objectives, Issues, Direction
- IRWM Projects on the CNF
- Other CNF Projects



Where is the Cleveland National Forest?

# DESIGNATION OF THE CLEVELAND NATIONAL FOREST

- 1891-1908: Forest reserves in Southern California were identified to protect watersheds (erosion, flooding, fires)
- 1907: Reserves became National Forests
- 1908: Several reserves are combined to create Cleveland National Forest (1,904,826 acres)



- Now ~424,000 acres

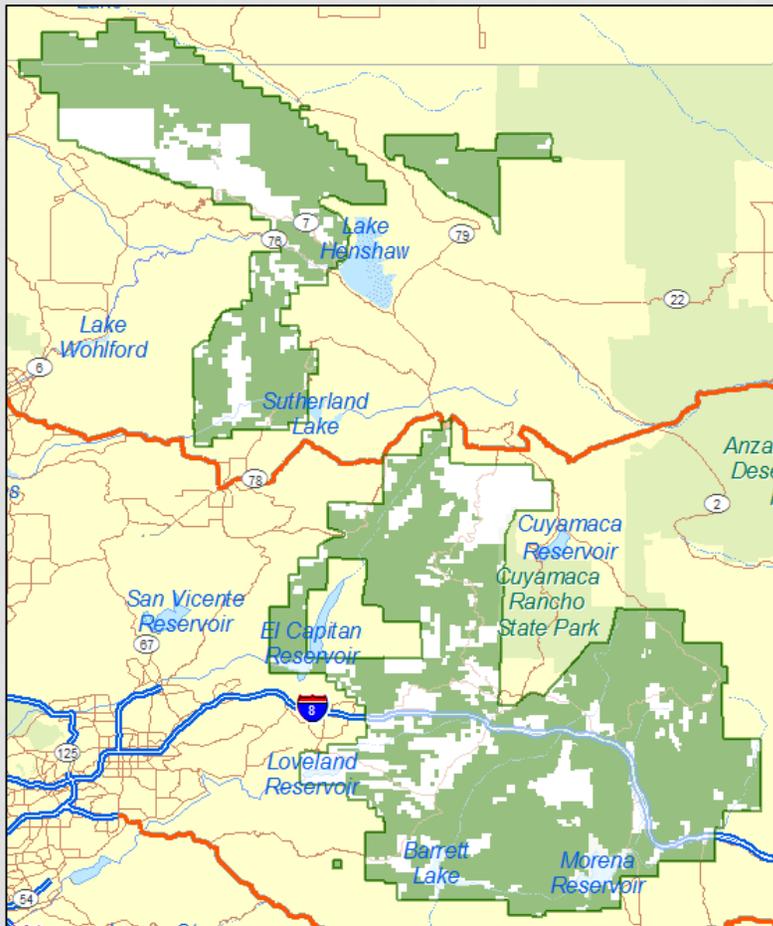
Trabuco Canyon, 1939

# FOREST SERVICE LAND MANAGEMENT OBJECTIVES

- Multiple use agency
  - Find balance between the different resources
    - Recreation, Range, Mining, Special Uses, Timber, Natural Resources, Historic Resources.
  - Provide opportunities for use while protecting natural resources and following applicable laws.



# CNF CHARACTERISTICS



- Numerous inholdings
- Adjacent to high population densities
- No timber activities
- High recreation and special uses
- Headwaters to many municipal water systems



# FIRE AND THE FOREST

- Vegetation is fire adapted
- Santa Ana winds and warm temperatures
- 95% of our fires are human caused.
- Most ignitions are concentrated:
  - On routes of travel.
  - Near border crossings.
  - Near unauthorized use.
  - Electrical lines.
- LMP directs fuels efforts to focus on WUI treatments/fuels reduction



# WATER QUALITY AND SUPPLY

Invasive weeds



Soils  
vulnerable  
to erosion.

# BENEFICIAL USES

- Many downstream beneficial uses

- Water supply
  - Agriculture
  - Domestic
  - Municipal



Arroyo Toad

- Recreation
- Habitat for aquatic and terrestrial species

- Forest supports
  - long list of T&E
  - FS Sensitive species.



Calif. Gnatcatcher

# WATERSHED MANAGEMENT REGIONAL OFFICE DIRECTION 2015



- Water rights-promote instream flows.
- Partnership funding for implementation
- Watershed Condition Framework
- Fire Settlement money

# WATERSHED CONDITION FRAMEWORK

- Evaluate watershed condition
  - Systematic process
- Prioritize watershed improvement projects
  - Focus program of work and integrate resources
  - Increase the efficiency and effectiveness of watershed improvement.
- Enhance coordination with partners
- Measure accomplishments
  - Improve national, regional, and local-scale reporting of watershed condition
- Increase agency accountability.



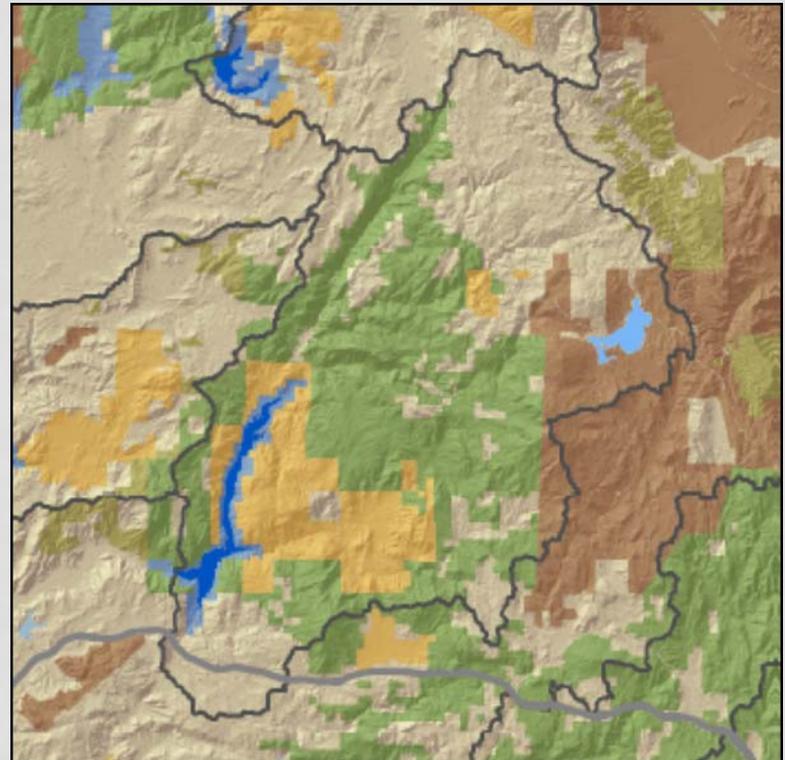
# WATERSHED CONDITION FRAMEWORK

- Watershed Condition Assessment
  - develop priority watersheds and create restoration action plans
    - Cedar Creek
    - Kitchen Creek-Cottonwood Creek
  - Cedar Creek Priority Watershed WRAP
    - Invasive weed treatment
    - Trail and road decommissioning
    - Removal of feral pigs



# SAN DIEGO IRWM PROJECTS

- Invasive weed removal in the El Capitan Reservoir Basin
  - Fire settlement funds
  - SDRPF, BCLT, and City of SD



- 50 miles of FS stream corridor
- 335 acres of weed treatment

# SAN DIEGO IRWM PROJECTS

- Trail and impacted site management
- Habitat improvement on 62 acres



# SAN DIEGO IRWM PROJECTS



## Invasive species removal

- Feral pig eradication—rooting, disease, sedimentation
- Invasive aquatic species removal—predatory species prey on native aquatic species or compete with them for resources.

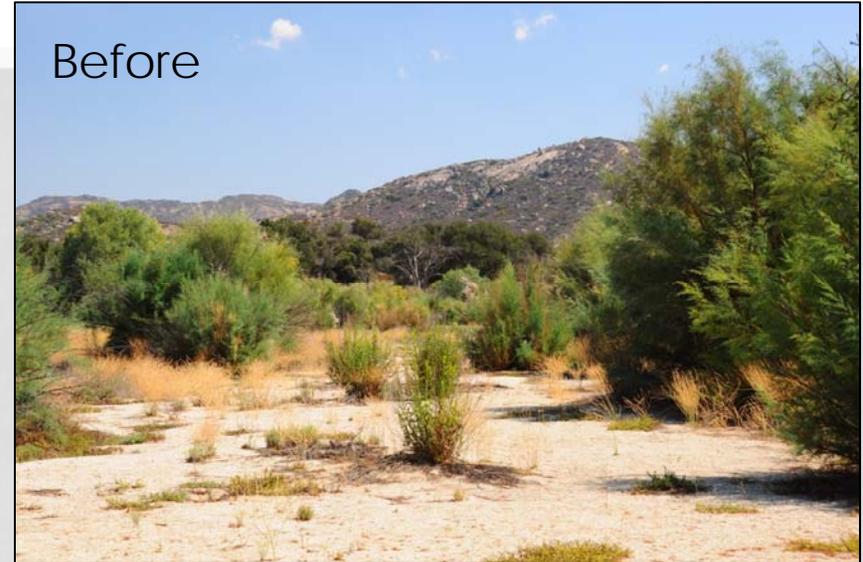


# WATERSHED MANAGEMENT AND ONGOING PROJECTS

- Fire Prevention—WUI and community defense, fuel breaks
- Recreation—upgrading facilities, providing facilities in high use areas, trail stormproofing.
- Mining and Special Uses—include mitigations and BMPs in their permit applications
- Range—work with ranchers to protect sensitive areas and decommission old stockwater ponds
- Natural Resources—invasive weed removal, aquatic organism passage, manage road system, stormproof roads, oak replanting, managing pests (GSOB), remove invasive species



# WEED MANAGEMENT



- Cut/pile tamarisk with chainsaws & herbicide spray the cut stump (Triclopyr).
- Replanted with native vegetation: willow and cottonwood cuttings gathered on site and deergrass container plants.



# MARIJUANA GROW SITE CLEANUPS

- Leave behind trash, infrastructure, pesticides, poisons, dead animals.
- Use a significant amount of water during the grow operations.



# IMPACTED SITES

- CERCLA sites
- Burned and abandoned cabins
- Dumpsites
- Pose water quality concerns
- Impact habitat



# TRAILS AND RECREATION



- Reroute trails out of sensitive areas.
- Stormproof trails
- Upgrade/provide facilities in high use areas.



# ROUTE MANAGEMENT



- Unauthorized route management.
- Consider relocating or decommissioning routes in sensitive areas.
- Stormproof system roads and address legacy road problems.



# STOCKPOND REMOVAL AND MEADOW RESTORATION

- Non-functioning stockponds
- Meadows with gullies



# QUESTIONS?

