



Oak Creek Watershed Restoration Project

PULLOUTS, PROTECTION, AND THE PUBLIC

MANAGING BY NETWORK – JUNE 3, 2020

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Challenge

Setting: Pullouts, protection, and the public packed into a heavily visited rec destination

- ▶ Challenges exist to protect the watershed while managing visitor behavior at numerous designated recreation sites within an approximately 15-mile stretch of State Rt. 89A.
- ▶ Ongoing partner efforts needed to ensure success.



Project Evolution

NEPA Process: Before, during, and after — partners have been involved from HOAs to cities to state agencies to non-profits

Informal Partnerships: Developed on an as-needed basis as project evolved

* Reactive response that became proactive

- ADEQ
- ADOT
- AZCC
- Slide Rock State Park
- Oak Creek Watershed Council
- National Forest Foundation



Project Evolution: Range of Permittees

Who Are We Working With?

Contrast
established state agencies
with a growing non-profit



PUBLIC

- ADEQ
- ADOT

PRIVATE

- Oak Creek Watershed Council

Project Location

- ▶ Oak Creek is a major perennial stream bisecting and draining the upper, middle, and lower Oak Creek watersheds.
- ▶ Unique Resources: Habitat for threatened species.
 - Northern Mexican gartersnake
 - Narrow-headed gartersnake
 - Yellow-billed cuckoo
 - Mexican spotted owl



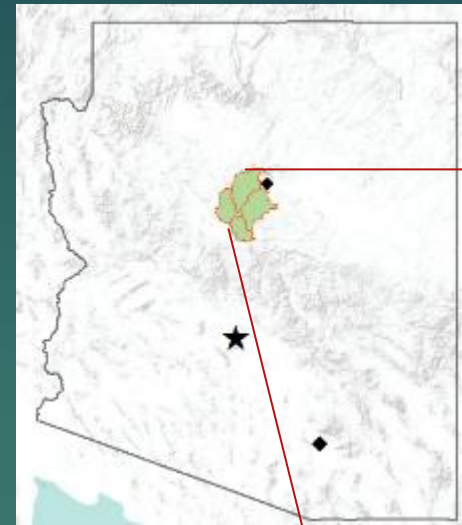
Narrow-headed gartersnake

Daily Recreationists: ~7,800 people and ~200 dogs; ~2,400 swim or wade

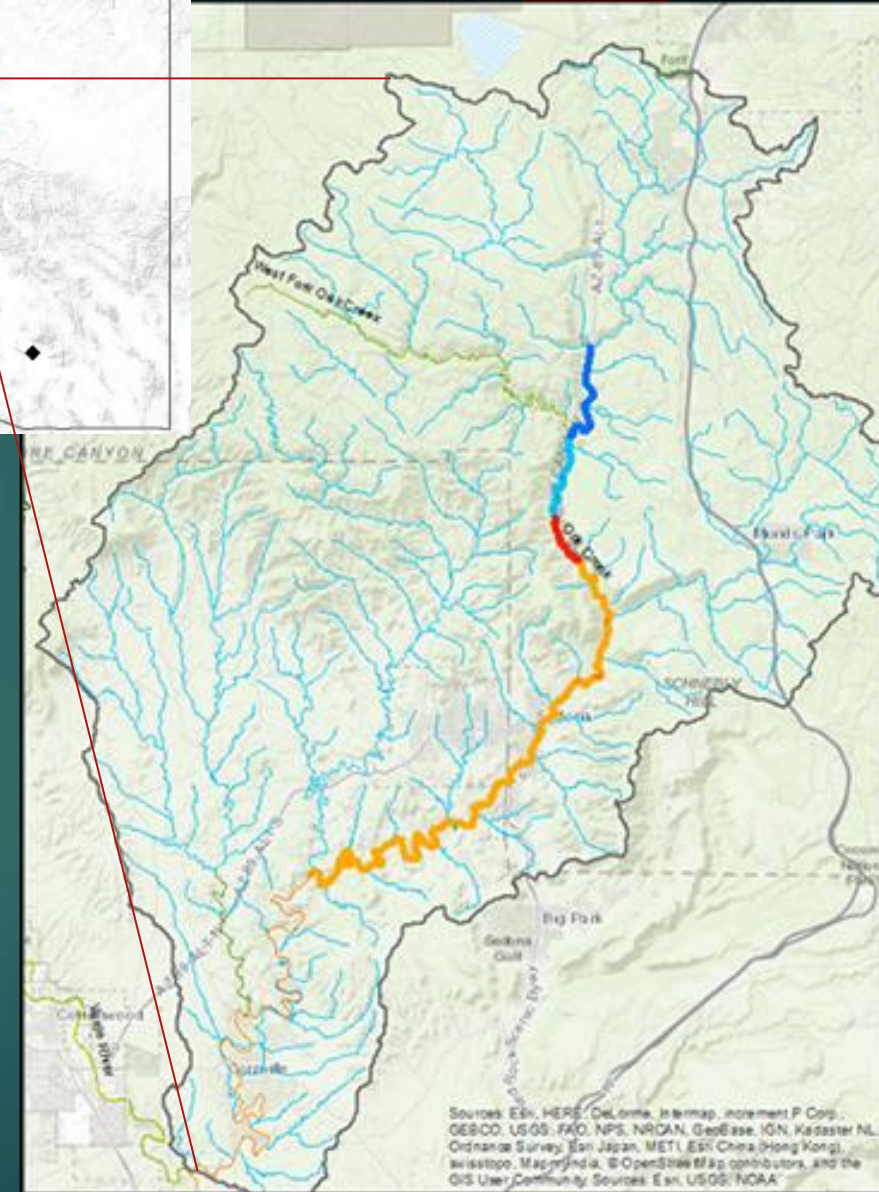


Purpose and Need

- ▶ Watershed: Impaired functional condition
 - ▶ Water quality is impaired due to *E. coli*
 - ▶ Poor ground cover and soil conditions negatively effect riparian habitat
 - ▶ Excessive unauthorized trails negatively effect water quality through increased erosion and sedimentation
 - ▶ Fecal matter from forest visitors and their pets is often left near waterways, which results in *E. coli* getting into surface waters
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- ▶ Need: Restore watershed conditions, including water quality, aquatic species habitat, and riparian vegetation
 - ▶ Need: Reduce adverse impacts of recreational activities



Oak Creek Watershed



Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeBCo, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), Swisstopo, Mapbox India, © OpenStreetMap contributors, and the GIS User Community
Sources: Esri, USGS, NOAA

Pre-NEPA

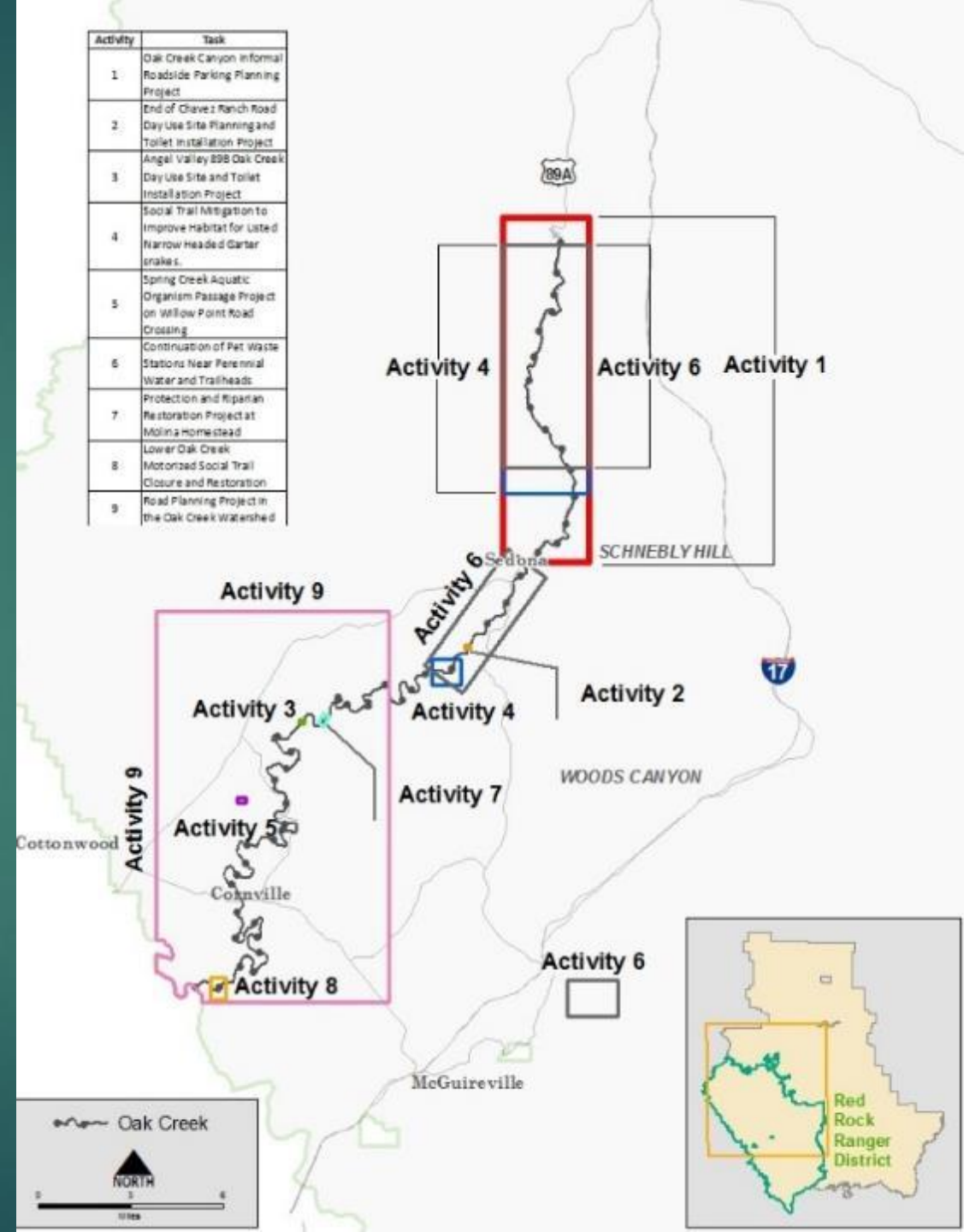
- ▶ **2016:** The proposed activities identified in the Forest Service 2016 middle and lower Oak Creek watershed restoration action plan to improve watershed conditions. The action plan was developed as part of the Forest Servicewide watershed condition framework, for forests and grasslands.
- ▶ **2017:** Consultant Kimley Horn completed a pullout closure evaluation (Activity 1)

- Forest Service
- ADOT Northcentral District
- ADOT Systems, Management, and Operations Group
- AZ State Parks
- Coconino Co.
- City of Sedona
- AZ Depart of Public Safety
- Coconino Sheriff's Office
- Sedona Fire District

Restoration Activities

- ▶ Focus: watershed restoration
- ▶ Nine activities designed to meet the purpose and need
- ▶ Public: Some people or stakeholders wanted project focus to be recreation (out of scope)

Activity	Task
1	Oak Creek Canyon Informal Roadside Parking Planning Project
2	End of Chaves Ranch Road Day Use Site Planning and Toilet Installation Project
3	Angel Valley 898 Oak Creek Day Use Site and Toilet Installation Project
4	Social Trail Mitigation to Improve Habitat for Listed Narrow Headed Garter snakes.
5	Spring Creek Aquatic Organism Passage Project on Willow Point Road Crossing
6	Continuation of Pet Waste Stations Near Perennial Water and Trailheads
7	Protection and Riparian Restoration Project at Molina Homestead
8	Lower Oak Creek Motorized Social Trail Closure and Restoration
9	Road Planning Project in the Oak Creek Watershed



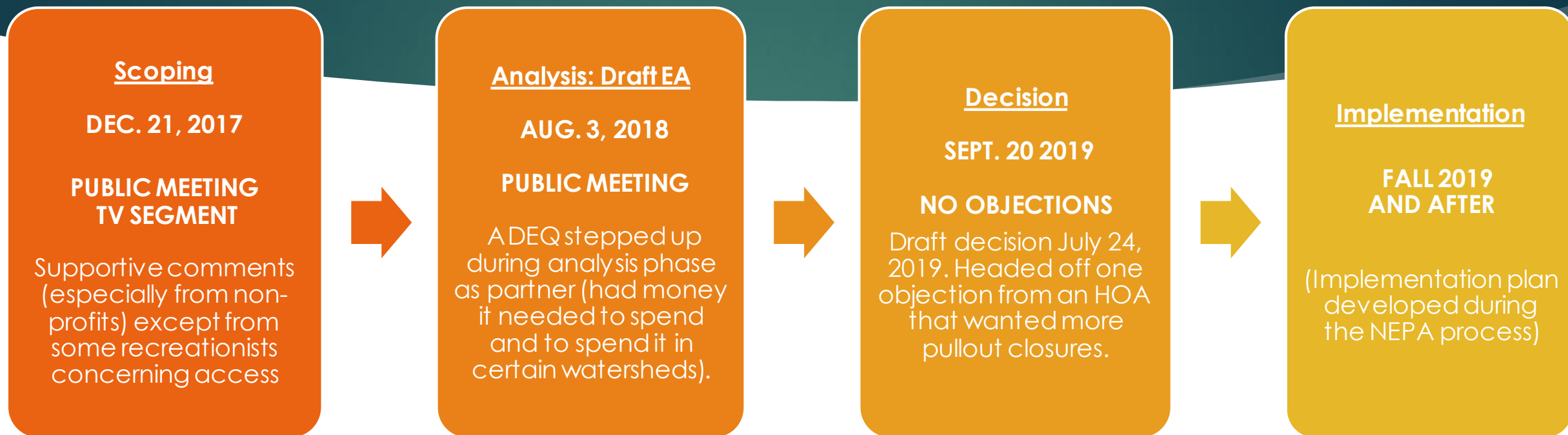
1	Oak Creek Canyon informal roadside parking planning
2	End of Chavez Ranch Road day-use site planning and toilet installation
3	Angel Valley 89B Oak Creek day-use site and toilet installation
4	Unauthorized trail mitigation to improve habitat for listed narrow headed gartersnakes.
5	Spring Creek aquatic organism passage on Willow Point road crossing
6	Continuation of pet-waste stations near perennial water and trailheads
7	Protection and riparian restoration at Molina homestead
8	Lower Oak Creek unauthorized motorized trail closure and restoration
9	Road decommissioning in the Oak Creek watershed

Activities by Number

The project's focus is watershed restoration, and includes nine specific activities designed to meet the purpose and need.



NEPA Timeline



“As the new district ranger to the Red Rock Ranger District, I am pleased to sign the Oak Creek Watershed Restoration project as my first decision. Protection of the Oak Creek watershed is imperative to maintain a healthy riparian habitat for plants, animals, and people.”

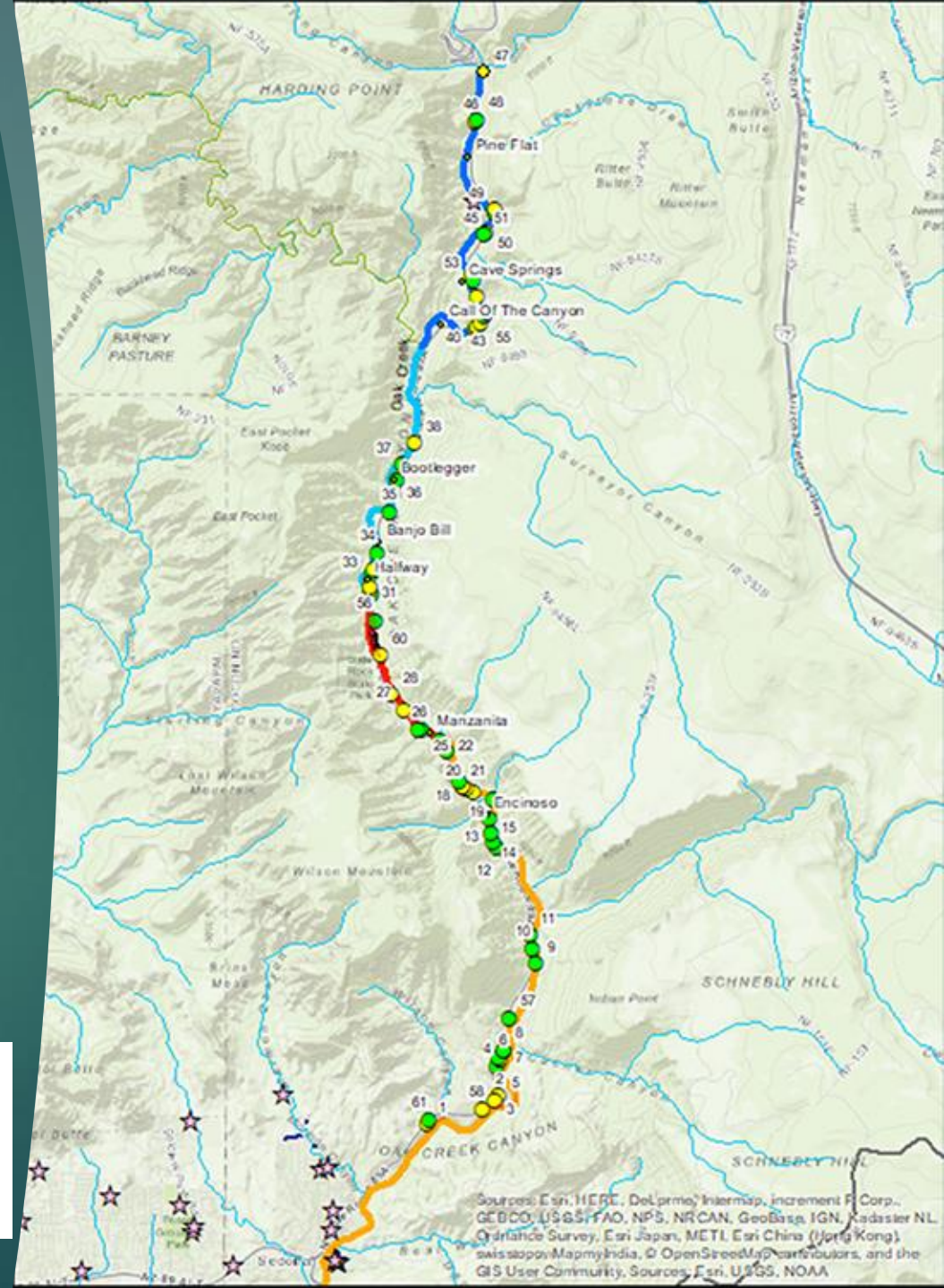
-- **Red Rock District Ranger Amy Tinderholt**

Activity 1: Decision

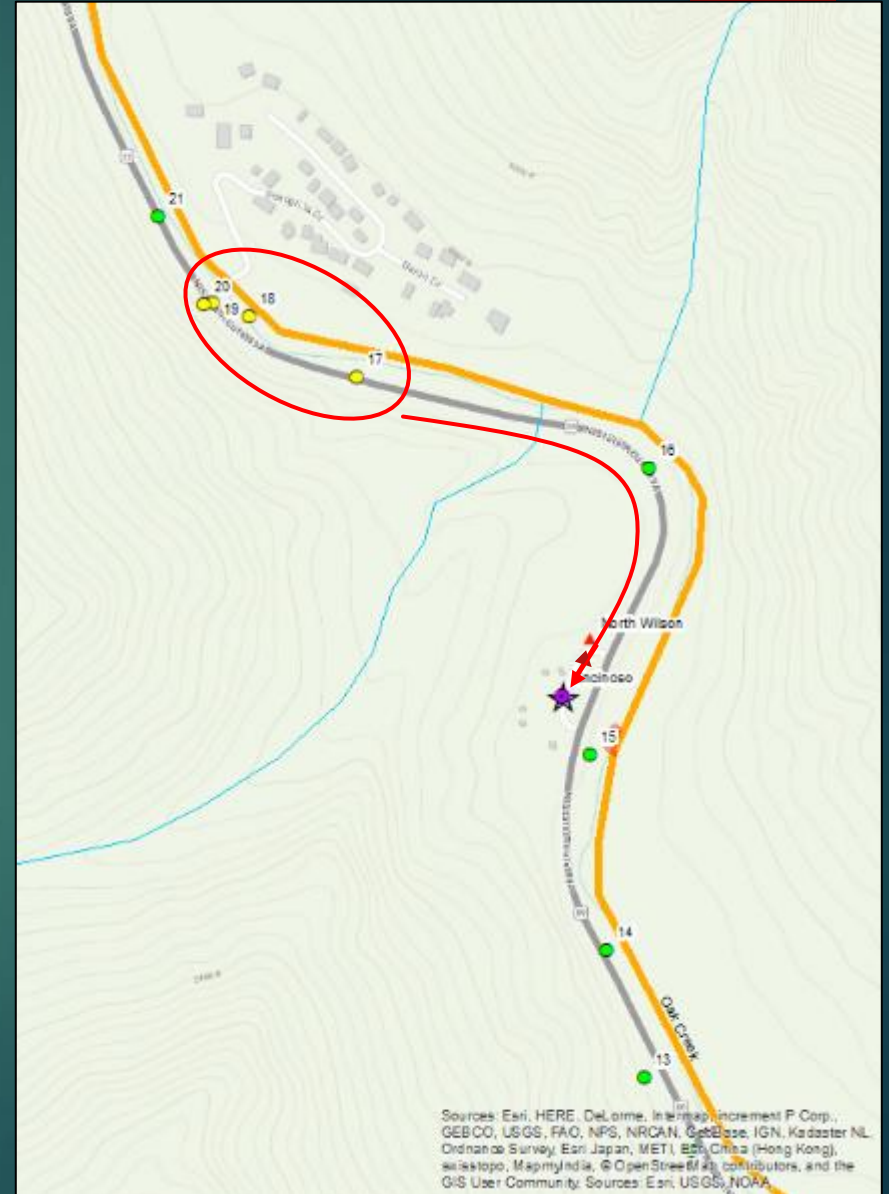
▶ Setting: OC Canyon—8 established rec sites w/ facilities. Allows for 650 designated parking spots.

- ▶ 60 Unauthorized Pullouts Analyzed
- ▶ 26 unauthorized pull-outs to be closed
- ▶ 34 unauthorized pull-outs to remain open
- ▶ Need for Pullout Reduction: Doubles visitor use
- ▶ Parking by the Numbers: 60 unauthorized pullouts allow for 600 vehicles. Closure of 26 pullouts will reduce number of vehicles by estimated 39% or 260 vehicles

- ▶ Pullout Rehab: ADEQ funding (\$240,000) with work by ADOT
- ▶ Social Trail Rehab: ADEQ funding (\$80,000) and NFF (\$ TBD) with work to be done by AZCC



Activity 1: Unauthorized Pullouts



Activity 1: Social Trail Rehabilitation



Activity 1: Lessons During Process

Learned the Hard Way

Project partners did not intend to be implementers, especially for Activity 1.

- When my former district ranger said: “I’m not in the guardrail business” — partner connections had to be made — and made quickly to succeed
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Funding Hero Appeared

Scoping process made it clear to the public that no funding was available.

To our surprise, ADEQ (who had not been a player up to now) stepped up to ask if it could fund restoration in Oak Creek to improve water quality.

Partner Risks: Changing Personnel at Forest Service (with more partner stability)

Activity 1: Lessons During Process

Implementation Plan

With caution not to be pre-decisional, the Forest Service drafted an internal implementation plan on Feb. 15, 2019 (prior to the final EA) to define potential implementers and funds. Rationale:



Rationale: Decision echoed implementation doc and vice versa.

- **ADEQ:** Transfer funds to ADOT (intrastate transfer) for guardrails—ADOT contractor to do install
- **ADEQ:** Transfers funds to NFF to pay AZCC to do social trail rehab.
- **AZCC:** Formal no-fund agreement: Between Forest Service with AZCC.

Activity 1: Different Partner Missions

Pullout Context: Some wanted to close the majority while others wanted them open.

Forest Service: Supported closing more than half of pull-outs due to water quality and resource concerns, with goal to lessen sedimentation in the water.

ADOT: Supported closing less than half the pullouts to use for safety, accessibility for highway maintenance, or snowplow turn-arounds

ADEQ: Supported closing almost all pullouts and reducing the number of recreationists impacting the canyon at one time, with goal to improve human health by lessening *E. coli* exceedances.

- “The goal for FY20-21 is for *E. coli* to exceed the state standard in less than 10% of samples taken at low flow during summer recreational season (May-September).”

Activity 1: Different Partner Missions

Pullout Context: Some wanted to close the majority while others wanted them open.

Traffic Matters (as affiliated HOA): Supported closing almost all pullouts and reduce the number of recreationists impacting the canyon at one time, with goal to lessen *E. coli* exceedances.

City of Sedona and Coconino and Yavapai Counties: Supported some pullout closures but looking ahead to alternative transportation options, including a shuttle system to bring people into canyon without their vehicles.

▶ Future: Possible to close one or more pullouts in future, if agreement of original Kimley Horn partners.

Traffic Matters

Originated: Represents 400+ property owners in Oak Creek Property Owners Association. Subcommittee formed in 2016.

Purpose: To bring various government agencies to the table to mitigate present and future traffic by fostering coordination, cooperation and communication.

Membership: Stakeholders affected by traffic in area

- Oak Creek Canyon Homeowners Association
- City of Sedona
- Sedona Chamber of Commerce and Tourism Bureau
- Coconino and Yavapai Counties
- AZ State Parks & Trails
- AZ Department of Transportation
- US Forest Service
- Department of Public Service



Overlapping in OC Canyon

- Slide Rock State Park – Fence Installation
 - Scenery Concerns from Keep Sedona Beautiful
 - Emergency Trail Need by Sedona Fire Department
 - Partner Implementation: ADOT to repair road shoulder as prep
 - Partner Implementation: AZCC to rehab 4,000 feet of social trail
- ADOT Tree Clearing in OC Canyon
 - 1,700 trees reduced to 700 tree – Sierra Club and citizen group
- ADOT Paving Project – 20-plus miles (includes 5 of the 26 pullouts)

▶ Maintain Trust: Important to negotiate solutions—establish helpful dialogue to resolve problems

Activity 6: Pet-waste stations

Partner: Oak Creek Watershed Council

- ▶ Context: Six stations exist already on Red Rock Ranger District
- ▶ Activity 6 Decision: Add pet waste stations at 17 locations, primarily in Oak Creek Canyon. Include some 300-foot down trail.
- ▶ Monitoring: OCWC will monitor and remove waste regularly in an effort to control litter and maintain healthy waterways.
- ▶ Funding: Stations funded by ADEQ (\$135,000) directly to OCWC with work to be done by OCWC.
- ▶ Agreement--Oak Creek Watershed Council: Extend and expand FS-OCWC partner agreement. Formal no-fund agreement established.



Activity 6

Oak Creek Watershed Council

- ▶ **Partner Risks:** Changing Personnel within the OCWC
- ▶ **Partner Need:** FS seeks to nurture partner—understand limitations
- ▶ **Partner Communication Challenge:** Partner has no one FS leader—which erodes structure, frequency, and quality of communications. Partner bounced to many FS contacts:
 - NEPA Planner (as related to Oak Creek WRAP decision)
 - Hydrologist (who wrote the formal agreement)
 - Volunteer Coordinator (annual outline and COVID mitigations)
 - Recreation Technicians (develop mutual buy-in)
 - Friends of the Forest (to install pet waste station infrastructure)
 - Concessionaire (partner to maintain stations)



Future Steps

FS to Design and Fund Activities

Implement remainder of OC WRAP activities—including establishment of two day-use sites.

- How is money flowing? ADEQ to fund toilets?
- Forest Service has no rec site designs in hand

FS to Supply Data to Funding Partners

Forest Service hydrologist to provide sediment reduction estimates to ADEQ, particularly around social trail rehab. NFF potentially to fund more opportunities, if more dollars are needed on the ground.

- Scientific Measures: *E. coli* vs. Sedimentation



Future Steps with Partners

Develop Messaging: Stakeholders seek to work together to present a consistent message to the public regarding parking changes. Possible messages:

- 200-plus parking spaces removed
- Transit will be taking people into the canyon—in future
- Remaining roadside parking in canyon is improved
- No more parking to be eliminated until transit plan ready

Support Outreach—Social Media: ADEQ is venturing into the area of public outreach and education. View “Stop the Poo-llution.” <https://azdeq.gov/ProtectOurWaters>

• **Messaging—How to Succeed?**

FS believes locals already know situation while tourists cannot be reached in advance.

• **Messaging—Be Transparent on Agency’s Limitations.**

Touch base to stay on task, even if FS not able to participate at this time. “Listen” through exchanges.



Reflections...

