

# APPENDICES

## South Lone Tree Road

### Planning & Environmental Linkages (PEL) Study

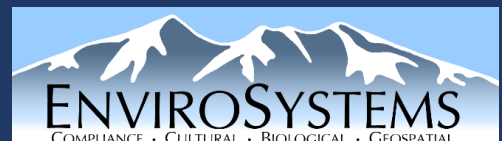
January 2023



# METROPLAN

GREATER † FLAGSTAFF

Prepared by



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**APPENDIX A:**  
**USFWS and AGFD Online Tools**



## United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Arizona Ecological Services Field Office  
9828 North 31st Ave  
#c3  
Phoenix, AZ 85051-2517  
Phone: (602) 242-0210 Fax: (602) 242-2513

In Reply Refer To:  
Project Code: 2022-0076496  
Project Name: MetroPlan

August 18, 2022

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

### To Whom It May Concern:

The Fish and Wildlife Service (Service) is providing this list under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*). The list you have generated identifies threatened, endangered, proposed, and candidate species, and designated and proposed critical habitat, that *may* occur within the One-Range that has been delineated for the species (candidate, proposed, or listed) and its critical habitat (designated or proposed) with which your project polygon intersects. These range delineations are based on biological metrics, and do not necessarily represent exactly where the species is located. Please refer to the species information found on ECOS to determine if suitable habitat for the species on your list occurs in your project area.

The purpose of the Act is to provide a means whereby threatened and endangered species and the habitats upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of Federal trust resources and to determine whether projects may affect federally listed species and/or designated critical habitat. A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If the Federal action agency determines that listed species or critical habitat *may be affected* by a federally funded, permitted or authorized activity, the agency must consult with us pursuant to 50 CFR 402. Note that a "may affect" determination includes effects that may not be adverse and that may be beneficial, insignificant, or discountable. An effect exists even if only one individual



or habitat segment may be affected. The effects analysis should include the entire action area, which often extends well outside the project boundary or "footprint." For example, projects that involve streams and river systems should consider downstream affects. If the Federal action agency determines that the action may jeopardize a *proposed* species or may adversely modify *proposed* critical habitat, the agency must enter into a section 7 conference. The agency may choose to confer with us on an action that may affect proposed species or critical habitat.

Candidate species are those for which there is sufficient information to support a proposal for listing. Although candidate species have no legal protection under the Act, we recommend that they be considered in the planning process in the event they become proposed or listed prior to project completion. More information on the regulations (50 CFR 402) and procedures for section 7 consultation, including the role of permit or license applicants, can be found in our Endangered Species Consultation Handbook at: <http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>.

We also advise you to consider species protected under the Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703-712) and the Bald and Golden Eagle Protection Act (Eagle Act) (16 U.S.C. 668 *et seq.*). The MBTA prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when authorized by the Service. The Eagle Act prohibits anyone, without a permit, from taking (including disturbing) eagles, and their parts, nests, or eggs. Currently 1,026 species of birds are protected by the MBTA, including the western burrowing owl (*Athene cunicularia hypugaea*). Protected western burrowing owls can be found in urban areas and may use their nest/burrows year-round; destruction of the burrow may result in the unpermitted take of the owl or their eggs.

If a bald eagle or golden eagle nest occurs in or near the proposed project area, our office should be contacted for Technical Assistance. An evaluation must be performed to determine whether the project is likely to disturb or harm eagles. The National Bald Eagle Management Guidelines provide recommendations to minimize potential project impacts to bald eagles (see <https://www.fws.gov/birds/management/project-assessment-tools-and-guidance/guidance-documents/eagles.php> and <https://www.fws.gov/birds/management/managed-species/eagle-management.php>).

The Division of Migratory Birds (505/248-7882) administers and issues permits under the MBTA and Eagle Act, while our office can provide guidance and Technical Assistance. For more information regarding the MBTA, BGEPA, and permitting processes, please visit the following web site: <https://www.fws.gov/birds/management.php>. Guidance for minimizing impacts to migratory birds for communication tower projects (e.g. cellular, digital television, radio, and emergency broadcast) can be found at <https://www.fws.gov/migratorybirds/pdf/management/usfwscommtowerguidance2016update.pdf>.

The U.S. Army Corps of Engineers (Corps) may regulate activities that involve streams (including some intermittent streams) and/or wetlands. We recommend that you contact the Corps to determine their interest in proposed projects in these areas. For activities within a National Wildlife Refuge, we recommend that you contact refuge staff for specific information

about refuge resources, please visit <https://www.fws.gov/southwest/refuges/> to locate the refuge you would be working in or around.

If your action is on tribal land or has implications for off-reservation tribal interests, we encourage you to contact the tribe(s) and the Bureau of Indian Affairs (BIA) to discuss potential tribal concerns, and to invite any affected tribe and the BIA to participate in the section 7 consultation. In keeping with our tribal trust responsibility, we will notify tribes that may be affected by proposed actions when section 7 consultation is initiated. For more information, please contact our Tribal Coordinator, John Nystedt, at 928/556-2160 or [John.Nystedt@fws.gov](mailto:John.Nystedt@fws.gov).

We also recommend you seek additional information and coordinate your project with the Arizona Game and Fish Department. Information on known species detections, special status species, and Arizona species of greatest conservation need, such as the western burrowing owl and the Sonoran desert tortoise (*Gopherus morafkai*) can be found by using their Online Environmental Review Tool, administered through the Heritage Data Management System and Project Evaluation Program (<https://www.azgfd.com/wildlife/planning/projevalprogram/>).

We appreciate your concern for threatened and endangered species. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office. If we may be of further assistance, please contact our Flagstaff office at 928/556-2157 for projects in northern Arizona, our general Phoenix number 602/242-0210 for central Arizona, or 520/670-6144 for projects in southern Arizona.

Sincerely,  
/s/

Mark A. Lamb  
Acting Field Supervisor  
Attachment

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Migratory Birds
- Wetlands

## Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Arizona Ecological Services Field Office**

9828 North 31st Ave

#c3

Phoenix, AZ 85051-2517

(602) 242-0210

## Project Summary

Project Code: 2022-0076496  
Project Name: MetroPlan  
Project Type: Easement / Right-of-Way  
Project Description: Road Widening  
Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@35.1664413,-111.64562775342858,14z>



Counties: Coconino County, Arizona



## Endangered Species Act Species

There is a total of 6 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

## Birds

NAME	STATUS
California Condor <i>Gymnogyps californianus</i> Population: U.S.A. only, except where listed as an experimental population There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available. Species profile: <a href="https://ecos.fws.gov/ecp/species/8193">https://ecos.fws.gov/ecp/species/8193</a>	Endangered
California Condor <i>Gymnogyps californianus</i> Population: U.S.A. (specific portions of Arizona, Nevada, and Utah) There is <b>proposed</b> critical habitat for this species. The location of the critical habitat is not available. Species profile: <a href="https://ecos.fws.gov/ecp/species/8193">https://ecos.fws.gov/ecp/species/8193</a>	Experimental Population, Non- Essential
Mexican Spotted Owl <i>Strix occidentalis lucida</i> There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available. Species profile: <a href="https://ecos.fws.gov/ecp/species/8196">https://ecos.fws.gov/ecp/species/8196</a>	Threatened
Yellow-billed Cuckoo <i>Coccyzus americanus</i> Population: Western U.S. DPS There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available. Species profile: <a href="https://ecos.fws.gov/ecp/species/3911">https://ecos.fws.gov/ecp/species/3911</a>	Threatened

## Reptiles

NAME	STATUS
Northern Mexican Gartersnake <i>Thamnophis eques megalops</i> There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available. Species profile: <a href="https://ecos.fws.gov/ecp/species/7655">https://ecos.fws.gov/ecp/species/7655</a>	Threatened

## Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Candidate

## Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

## **USFWS National Wildlife Refuge Lands And Fish Hatcheries**

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

## Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

**The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern \(BCC\) list](#) or warrant special attention in your project location.** To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. <a href="https://ecos.fws.gov/ecp/species/1626">https://ecos.fws.gov/ecp/species/1626</a>	Breeds Oct 15 to Jul 31
Black-chinned Sparrow <i>Spizella atrogularis</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9447">https://ecos.fws.gov/ecp/species/9447</a>	Breeds Apr 15 to Jul 31



NAME	BREEDING SEASON
<b>Black-throated Gray Warbler <i>Dendroica nigrescens</i></b> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds May 1 to Jul 20
<b>Evening Grosbeak <i>Coccothraustes vespertinus</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 15 to Aug 10
<b>Golden Eagle <i>Aquila chrysaetos</i></b> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. <a href="https://ecos.fws.gov/ecp/species/1680">https://ecos.fws.gov/ecp/species/1680</a>	Breeds Jan 1 to Aug 31
<b>Grace's Warbler <i>Dendroica graciae</i></b> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds May 20 to Jul 20
<b>Lewis's Woodpecker <i>Melanerpes lewis</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9408">https://ecos.fws.gov/ecp/species/9408</a>	Breeds Apr 20 to Sep 30
<b>Long-eared Owl <i>asio otus</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/3631">https://ecos.fws.gov/ecp/species/3631</a>	Breeds Mar 1 to Jul 15
<b>Olive-sided Flycatcher <i>Contopus cooperi</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/3914">https://ecos.fws.gov/ecp/species/3914</a>	Breeds May 20 to Aug 31
<b>Pinyon Jay <i>Gymnorhinus cyanocephalus</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9420">https://ecos.fws.gov/ecp/species/9420</a>	Breeds Feb 15 to Jul 15
<b>Red-faced Warbler <i>Cardellina rubrifrons</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Jul 15
<b>Rufous-winged Sparrow <i>Aimophila carpalis</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jun 15 to Sep 30
<b>Virginia's Warbler <i>Vermivora virginiae</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9441">https://ecos.fws.gov/ecp/species/9441</a>	Breeds May 1 to Jul 31

NAME	BREEDING SEASON
Western Grebe <i>aechmophorus occidentalis</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/6743">https://ecos.fws.gov/ecp/species/6743</a>	Breeds Jun 1 to Aug 31

## Probability Of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

### Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

### Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

### Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

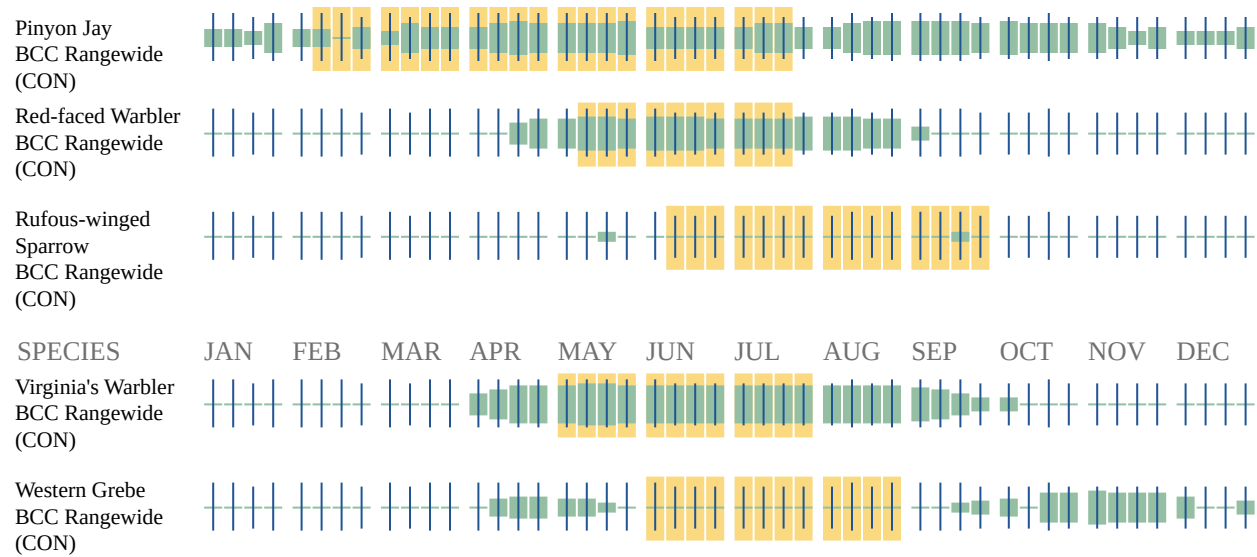
**No Data (-)**

A week is marked as having no data if there were no survey events for that week.

**Survey Timeframe**

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.





Additional information can be found using the following links:

- Birds of Conservation Concern <https://www.fws.gov/program/migratory-birds/species>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>

## Migratory Birds FAQ

**Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.**

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

**What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?**

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as



warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

### **What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?**

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

### **How do I know if a bird is breeding, wintering or migrating in my area?**

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the [RAIL Tool](#) and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

### **What are the levels of concern for migratory birds?**

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

### **Details about birds that are potentially affected by offshore projects**

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

### **What if I have eagles on my list?**

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

### **Proper Interpretation and Use of Your Migratory Bird Report**

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

## Wetlands

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

### RIVERINE

- [Riverine](#)

## **IPaC User Contact Information**

Agency: Flagstaff city  
Name: Stephanie Treptow  
Address: 23 E Fine Ave  
City: Flagstaff  
State: AZ  
Zip: 86001  
Email: streptow@esmaz.com  
Phone: 9286060519



# Arizona Environmental Online Review Tool Report



## *Arizona Game and Fish Department Mission*

*To conserve Arizona's diverse wildlife resources and manage for safe, compatible outdoor recreation opportunities for current and future generations.*

**Project Name:**

MetroPlan ROW

**Project Description:**

Road Widening

**Project Type:**

Transportation & Infrastructure, Road Improvements, Pedestrian enhancements (curbs, sidewalks, bike lanes, etc.)

**Contact Person:**

Stephanie Treptow

**Organization:**

EnviroSystems

**On Behalf Of:**

CITY

**Project ID:**

HGIS-17085

***Please review the entire report for project type and/or species recommendations for the location information entered. Please retain a copy for future reference.***

**Disclaimer:**

1. This Environmental Review is based on the project study area that was entered. The report must be updated if the project study area, location, or the type of project changes.
2. This is a preliminary environmental screening tool. It is not a substitute for the potential knowledge gained by having a biologist conduct a field survey of the project area. This review is also not intended to replace environmental consultation (including federal consultation under the Endangered Species Act), land use permitting, or the Departments review of site-specific projects.
3. The Departments Heritage Data Management System (HDMS) data is not intended to include potential distribution of special status species. Arizona is large and diverse with plants, animals, and environmental conditions that are ever changing. Consequently, many areas may contain species that biologists do not know about or species previously noted in a particular area may no longer occur there. HDMS data contains information about species occurrences that have actually been reported to the Department. Not all of Arizona has been surveyed for special status species, and surveys that have been conducted have varied greatly in scope and intensity. Such surveys may reveal previously undocumented population of species of special concern.
4. HabiMap Arizona data, specifically Species of Greatest Conservation Need (SGCN) under our State Wildlife Action Plan (SWAP) and Species of Economic and Recreational Importance (SERI), represent potential species distribution models for the State of Arizona which are subject to ongoing change, modification and refinement. The status of a wildlife resource can change quickly, and the availability of new data will necessitate a refined assessment.

**Locations Accuracy Disclaimer:**

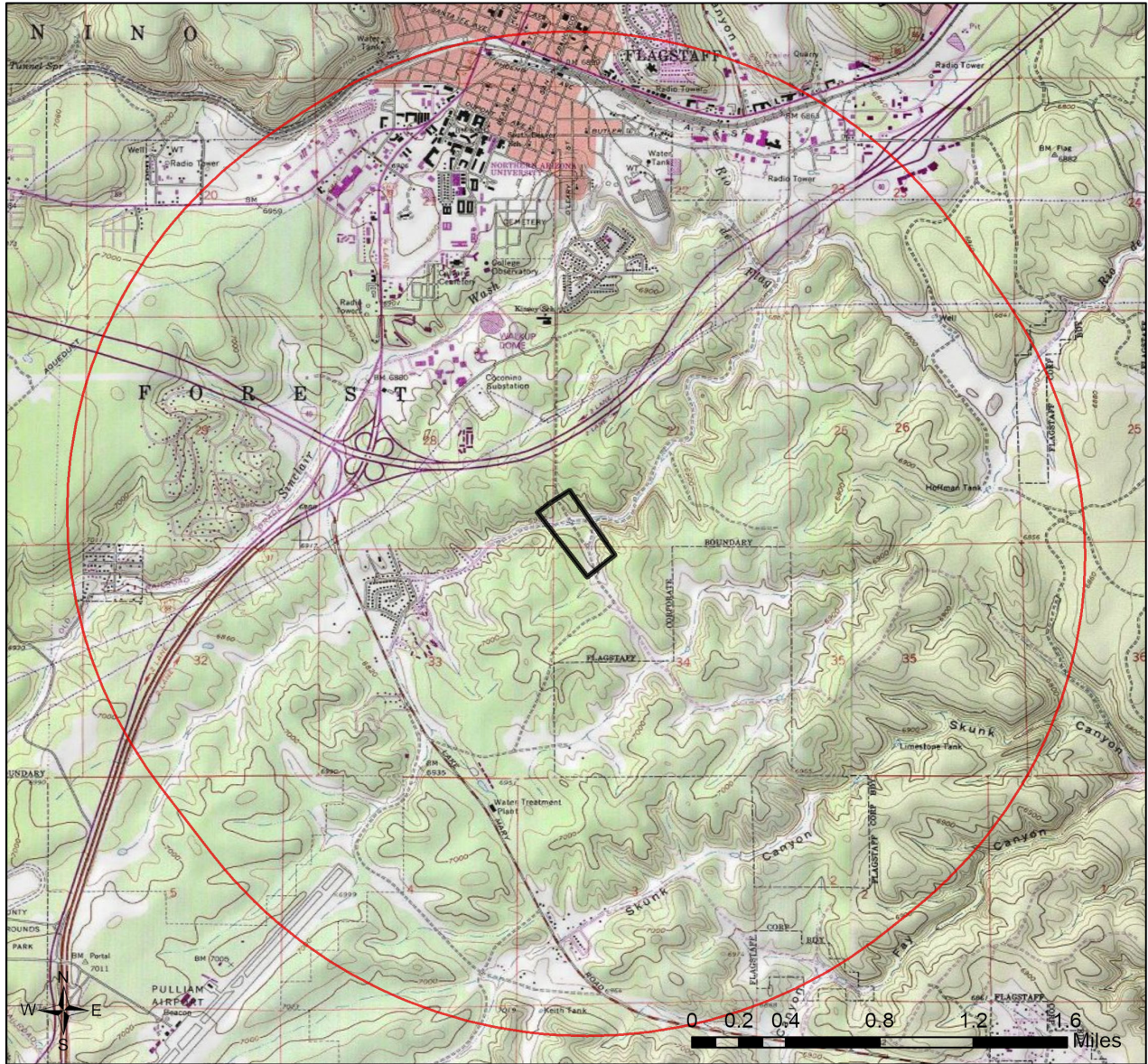
Project locations are assumed to be both precise and accurate for the purposes of environmental review. The creator/owner of the Project Review Report is solely responsible for the project location and thus the correctness of the Project Review Report content.

**Recommendations Disclaimer:**

1. The Department is interested in the conservation of all fish and wildlife resources, including those species listed in this report and those that may have not been documented within the project vicinity as well as other game and nongame wildlife.
2. Recommendations have been made by the Department, under authority of Arizona Revised Statutes Title 5 (Amusements and Sports), 17 (Game and Fish), and 28 (Transportation).
3. Potential impacts to fish and wildlife resources may be minimized or avoided by the recommendations generated from information submitted for your proposed project. These recommendations are preliminary in scope, designed to provide early considerations on all species of wildlife.
4. Making this information directly available does not substitute for the Department's review of project proposals, and should not decrease our opportunity to review and evaluate additional project information and/or new project proposals.
5. Further coordination with the Department requires the submittal of this Environmental Review Report with a cover letter and project plans or documentation that includes project narrative, acreage to be impacted, how construction or project activity(s) are to be accomplished, and project locality information (including site map). Once AGFD had received the information, please allow 30 days for completion of project reviews. Send requests to:  
**Project Evaluation Program, Habitat Branch**  
**Arizona Game and Fish Department**  
**5000 West Carefree Highway**  
**Phoenix, Arizona 85086-5000**  
**Phone Number: (623) 236-7600**  
**Fax Number: (623) 236-7366**  
**Or**  
[PEP@azgfd.gov](mailto:PEP@azgfd.gov)
6. Coordination may also be necessary under the National Environmental Policy Act (NEPA) and/or Endangered Species Act (ESA). Site specific recommendations may be proposed during further NEPA/ESA analysis or through coordination with affected agencies



## MetroPlan ROW USA Topo Basemap With Locator Map



- Buffered Project Boundary
- Project Boundary

Project Size (acres): 8.09  
 Lat/Long (DD): 35.1669 / -111.6480  
 County(s): Coconino  
 AGFD Region(s): Flagstaff  
 Township/Range(s): T21N, R7E  
 USGS Quad(s): FLAGSTAFF WEST

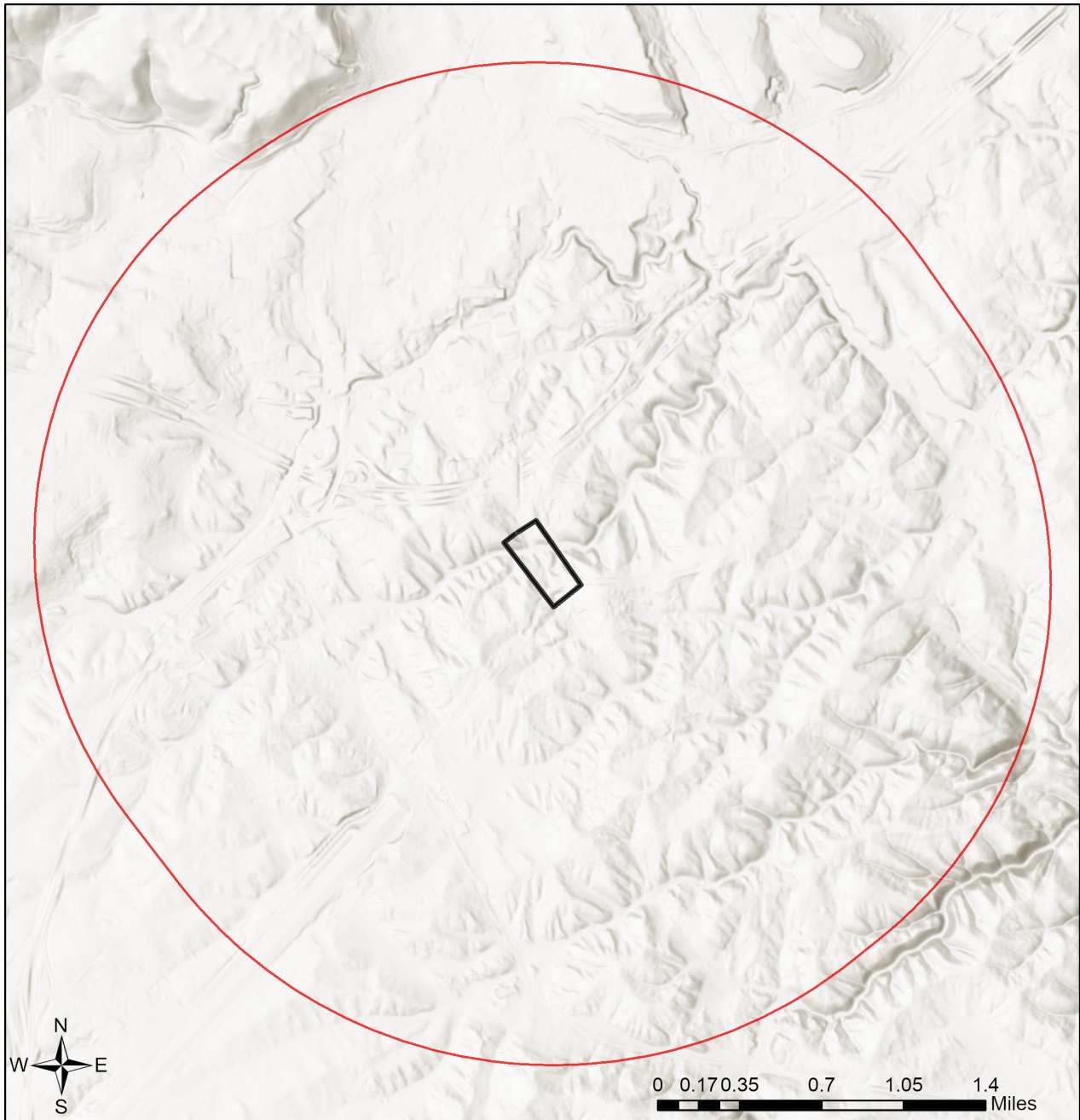
Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community





# MetroPlan ROW

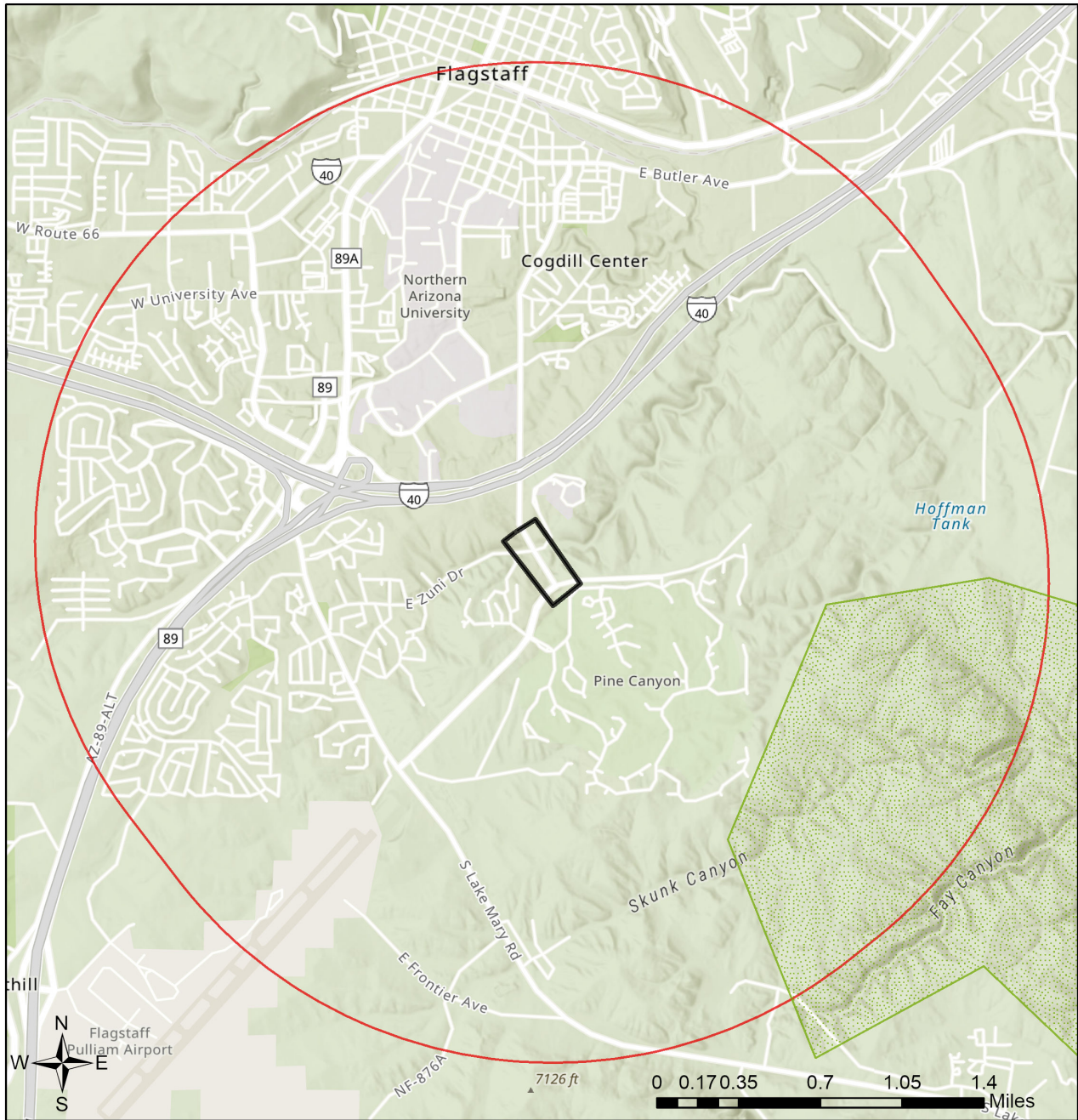
## Web Map As Submitted By User



Project Size (acres): 8.09  
Lat/Long (DD): 35.1669 / -111.6480  
County(s): Coconino  
AGFD Region(s): Flagstaff  
Township/Range(s): T21N, R7E  
USGS Quad(s): FLAGSTAFF WEST

Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

### MetroPlan ROW Important Areas



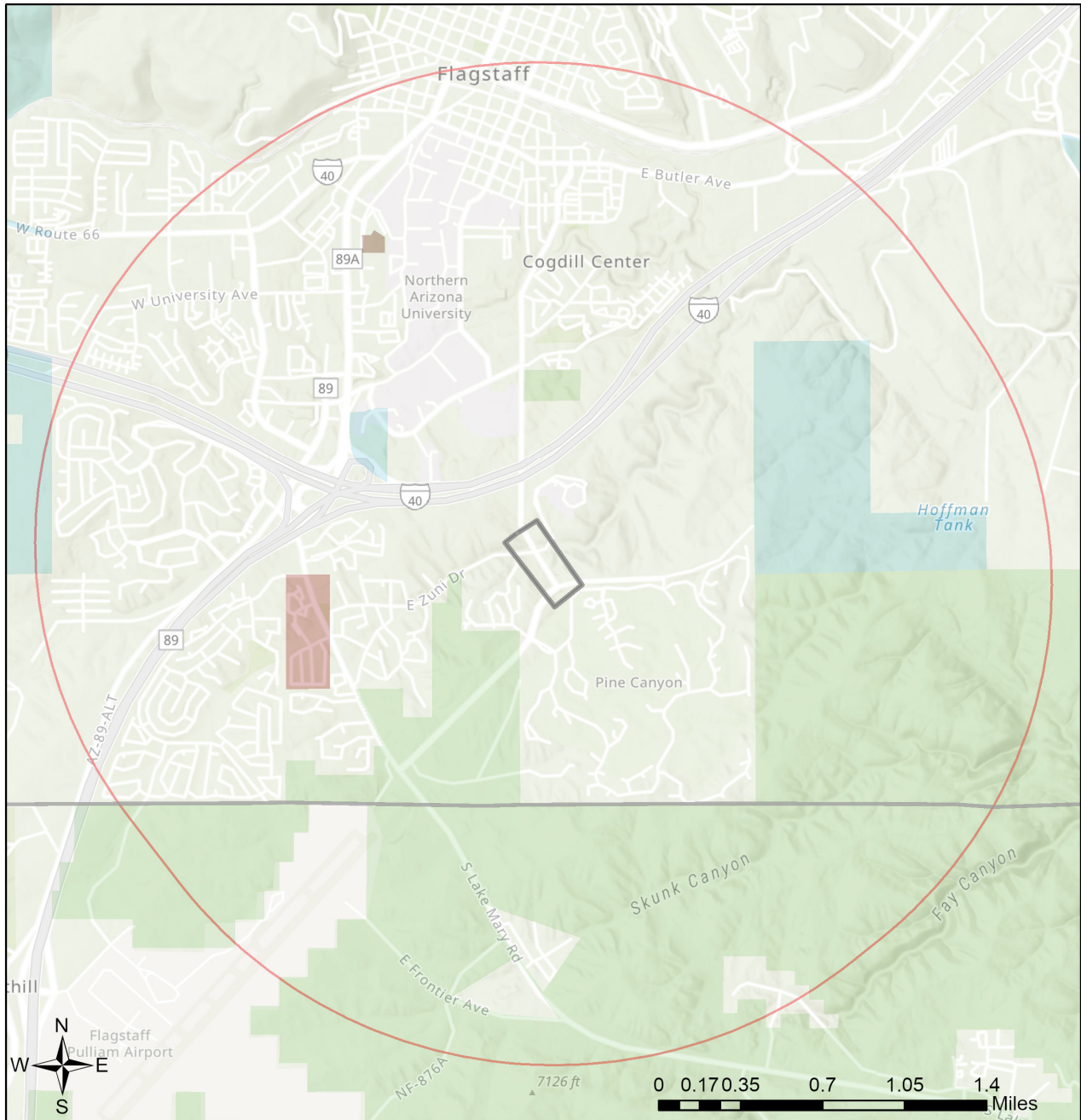
Project Size (acres): 8.09  
Lat/Long (DD): 35.1669 / -111.6480  
County(s): Coconino  
AGFD Region(s): Flagstaff  
Township/Range(s): T21N, R7E  
USGS Quad(s): FLAGSTAFF WEST

Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community  
Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community



# MetroPlan ROW

## Township/Ranges and Land Ownership



Project Size (acres): 8.09  
Lat/Long (DD): 35.1669 / -111.6480  
County(s): Coconino  
AGFD Region(s): Flagstaff  
Township/Range(s): T21N, R7E  
USGS Quad(s): FLAGSTAFF WEST

Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community  
Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

**Special Status Species Documented within 2 Miles of Project Vicinity**

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Aquilegia desertorum	Mogollon Columbine				SR	
Clematis hirsutissima	Clustered Leather Flower		S		HS	
Danaus plexippus	Monarch	C		S		
Eumops perotis californicus	Greater Western Bonneted Bat	SC		S		1B
Haliaeetus leucocephalus (wintering pop.)	Bald Eagle - Winter Population	SC, BGA	S	S		1A
Hedeoma diffusa	Flagstaff False Pennyroyal		S		SR	
Idionycteris phyllotis	Allen's Lappet-browed Bat	SC	S	S		1B

Note: Status code definitions can be found at <https://www.azgfd.com/wildlife/planning/wildlifeguidelines/statusdefinitions/>

**Special Areas Documented that Intersect with Project Footprint as Drawn**

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Bow and Arrow	Coconino County Wildlife Movement Area - Diffuse					

Note: Status code definitions can be found at <https://www.azgfd.com/wildlife/planning/wildlifeguidelines/statusdefinitions/>

**Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models**

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Accipiter gentilis	Northern Goshawk	SC	S	S		1B
Ambystoma mavortium nebulosum	Arizona Tiger Salamander					1B
Aquila chrysaetos	Golden Eagle	BGA		S		1B
Athene cunicularia hypugaea	Western Burrowing Owl	SC	S	S		1B
Baeolophus ridgwayi	Juniper Titmouse					1C
Buteo swainsoni	Swainson's Hawk					1C
Cardellina rubrifrons	Red-faced Warbler					1C
Chordeiles minor	Common Nighthawk					1B
Coccothraustes vespertinus	Evening Grosbeak					1B
Contopus cooperi	Olive-sided Flycatcher	SC				1C
Corynorhinus townsendii pallescens	Pale Townsend's Big-eared Bat	SC	S	S		1B
Crotalus cerberus	Arizona Black Rattlesnake					1B
Cynomys gunnisoni	Gunnison's Prairie Dog	SC		S		1B
Empidonax wrightii	Gray Flycatcher					1C
Euderma maculatum	Spotted Bat	SC	S	S		1B
Eugenes fulgens	Rivoli's Hummingbird					1B
Falco peregrinus anatum	American Peregrine Falcon	SC	S	S		1A
Geothlypis tolmiei	MacGillivray's Warbler					1B



**Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models**

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
<i>Gymnorhinus cyanocephalus</i>	Pinyon Jay			S		1B
<i>Melospiza lincolni</i>	Lincoln's Sparrow					1B
<i>Microtus longicaudus</i>	Long-tailed Vole					1B
<i>Microtus mexicanus</i>	Mexican Vole					1B
<i>Mustela nigripes</i>	Black-footed Ferret	LE,XN				1A
<i>Myotis occultus</i>	Arizona Myotis	SC		S		1B
<i>Myotis yumanensis</i>	Yuma Myotis	SC				1B
<i>Neotamias cinereicollis</i>	Gray-collared Chipmunk					1B
<i>Neotoma stephensi</i>	Stephen's Woodrat					1B
<i>Oreoscoptes montanus</i>	Sage Thrasher					1C
<i>Panthera onca</i>	Jaguar	LE				1A
<i>Patagioenas fasciata</i>	Band-tailed Pigeon					1C
<i>Peucedramus taeniatus</i>	Olive Warbler					1C
<i>Psiloscops flammeolus</i>	Flammulated Owl					1C
<i>Rallus limicola</i>	Virginia Rail					1C
<i>Sphyrapicus thyroideus</i>	Williamson's Sapsucker					1C
<i>Spizella breweri</i>	Brewer's Sparrow					1C
<i>Strix occidentalis lucida</i>	Mexican Spotted Owl	LT				1A
<i>Sturnella magna</i>	Eastern Meadowlark					1C
<i>Tadarida brasiliensis</i>	Brazilian Free-tailed Bat					1B

**Species of Economic and Recreation Importance Predicted that Intersect with Project Footprint as Drawn**

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
<i>Cervus elaphus</i>	Elk					
<i>Meleagris gallopavo</i>	Wild Turkey					
<i>Odocoileus hemionus</i>	Mule Deer					
<i>Patagioenas fasciata</i>	Band-tailed Pigeon					1C
<i>Puma concolor</i>	Mountain Lion					
<i>Sciurus aberti</i>	Abert's Squirrel					
<i>Ursus americanus</i>	American Black Bear					
<i>Zenaida macroura</i>	Mourning Dove					

**Project Type: Transportation & Infrastructure, Road Improvements, Pedestrian enhancements (curbs, sidewalks, bike lanes, etc.)**

**Project Type Recommendations:**

During the planning stages of your project, please consider the local or regional needs of wildlife in regards to movement, connectivity, and access to habitat needs. Loss of this permeability prevents wildlife from accessing resources, finding mates, reduces gene flow, prevents wildlife from re-colonizing areas where local extirpations may have occurred, and ultimately prevents wildlife from contributing to ecosystem functions, such as pollination, seed dispersal, control of prey numbers, and resistance to invasive species. In many cases, streams and washes provide natural movement corridors for wildlife and should be maintained in their natural state. Uplands also support a large diversity of species, and should be contained within important wildlife movement corridors. In addition, maintaining biodiversity and ecosystem functions can be facilitated through improving designs of structures, fences, roadways, and culverts to promote passage for a variety of wildlife. Guidelines for many of these can be found at: <https://www.azgfd.com/wildlife/planning/wildlifeguidelines/>.

Consider impacts of outdoor lighting on wildlife and develop measures or alternatives that can be taken to increase human safety while minimizing potential impacts to wildlife. Conduct wildlife surveys to determine species within project area, and evaluate proposed activities based on species biology and natural history to determine if artificial lighting may disrupt behavior patterns or habitat use. Use only the minimum amount of light needed for safety. Narrow spectrum bulbs should be used as often as possible to lower the range of species affected by lighting. All lighting should be shielded, canted, or cut to ensure that light reaches only areas needing illumination.

Minimize the potential introduction or spread of exotic invasive species, including aquatic and terrestrial plants, animals, insects and pathogens. Precautions should be taken to wash and/or decontaminate all equipment utilized in the project activities before entering and leaving the site. See the Arizona Department of Agriculture website for a list of prohibited and restricted noxious weeds at <https://www.invasivespeciesinfo.gov/unitedstates/az.shtml> and the Arizona Native Plant Society <https://aznps.com/invas> for recommendations on how to control. To view a list of documented invasive species or to report invasive species in or near your project area visit iMapInvasives - a national cloud-based application for tracking and managing invasive species at <https://imap.natureserve.org/imap/services/page/map.html>.

- To build a list: zoom to your area of interest, use the identify/measure tool to draw a polygon around your area of interest, and select "See What's Here" for a list of reported species. To export the list, you must have an account and be logged in. You can then use the export tool to draw a boundary and export the records in a csv file.

The Department recommends that wildlife surveys are conducted to determine if noise-sensitive species occur within the project area. Avoidance or minimization measures could include conducting project activities outside of breeding seasons.

Based on the project type entered, coordination with State Historic Preservation Office may be required (<https://azstateparks.com/>).

Design culverts to minimize impacts to channel geometry, or design channel geometry (low flow, overbank, floodplains) and substrates to carry expected discharge using local drainages of appropriate size as templates. Reduce/minimize barriers to allow movement of amphibians or fish (e.g., eliminate falls). Also for terrestrial wildlife, washes and stream corridors often provide important corridors for movement. Overall culvert width, height, and length should be optimized for movement of the greatest number and diversity of species expected to utilize the passage. Culvert designs should consider moisture, light, and noise, while providing clear views at both ends to maximize utilization. For many species, fencing is an important design feature that can be utilized with culverts to funnel wildlife into these areas and minimize the potential for roadway collisions. Guidelines for culvert designs to facilitate wildlife passage can be found on the home page of this application at <https://www.azgfd.com/wildlife/planning/wildlifeguidelines/>.

**Project Location and/or Species Recommendations:**

HDMS records indicate that one or more native plants listed on the **Arizona Native Plant Law and Antiquities Act** have been documented within the vicinity of your project area. Please contact:

Arizona Department of Agriculture  
1688 W Adams St.  
Phoenix, AZ 85007  
Phone: 602.542.4373

<https://agriculture.az.gov/sites/default/files/Native%20Plant%20Rules%20-%20AZ%20Dept%20of%20Ag.pdf> starts on page 44

Analysis indicates that your project is located in the vicinity of an identified **wildlife habitat connectivity feature**. The **County-level Stakeholder Assessments** contain five categories of data (Barrier/Development, Wildlife Crossing Area, Wildlife Movement Area- Diffuse, Wildlife movement Area- Landscape, Wildlife Movement Area- Riparian/Washes) that provide a context of select anthropogenic barriers, and potential connectivity. The reports provide recommendations for opportunities to preserve or enhance permeability. Project planning and implementation efforts should focus on maintaining and improving opportunities for wildlife permeability. For information pertaining to the linkage assessment and wildlife species that may be affected, please refer

to: <https://www.azgfd.com/wildlife/planning/habitatconnectivity/identifying-corridors/>.

Please contact the Project Evaluation Program ([pep@azgfd.gov](mailto:pep@azgfd.gov)) for specific project recommendations.

HDMS records indicate that one or more **Listed, Proposed, or Candidate** species or **Critical Habitat** (Designated or Proposed) have been documented in the vicinity of your project. The Endangered Species Act (ESA) gives the US Fish and Wildlife Service (USFWS) regulatory authority over all federally listed species. Please contact USFWS Ecological Services Offices at <https://www.fws.gov/office/arizona-ecological-services> or:

**Phoenix Main Office**  
9828 North 31st Avenue #C3  
Phoenix, AZ 85051-2517  
Phone: 602-242-0210  
Fax: 602-242-2513

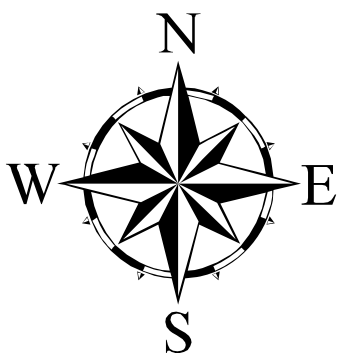
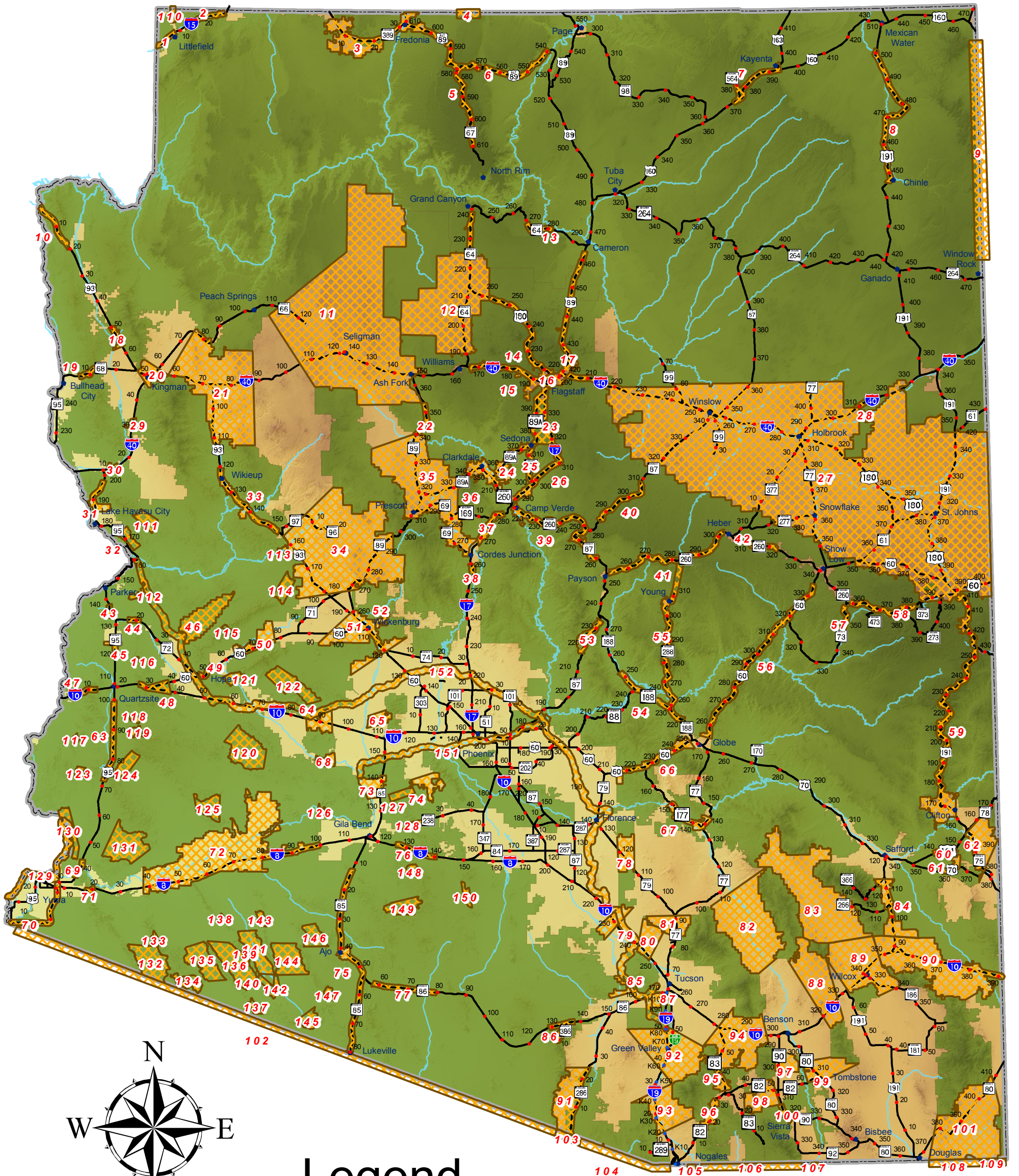
**Tucson Sub-Office**  
201 N. Bonita Suite 141  
Tucson, AZ 85745  
Phone: 520-670-6144  
Fax: 520-670-6155

**Flagstaff Sub-Office**  
SW Forest Science Complex  
2500 S. Pine Knoll Dr.  
Flagstaff, AZ 86001  
Phone: 928-556-2157  
Fax: 928-556-2121




**APPENDIX B:**  
**Wildlife Corridors in Arizona**

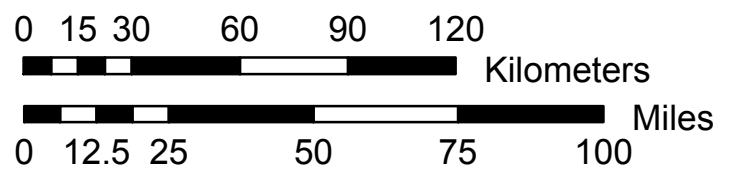


# ARIZONA'S WILDLIFE LINKAGES



## Legend

-  Potential Linkage Zone
-  Habitat Block
-  Fracture Zone



S. Lone Tree PEL Study  
**Figure 6-1. Arizona's Wildlife Linkages Map**











**APPENDIX C:**  
**USFWS Wetlands**



August 18, 2022

**Wetlands**

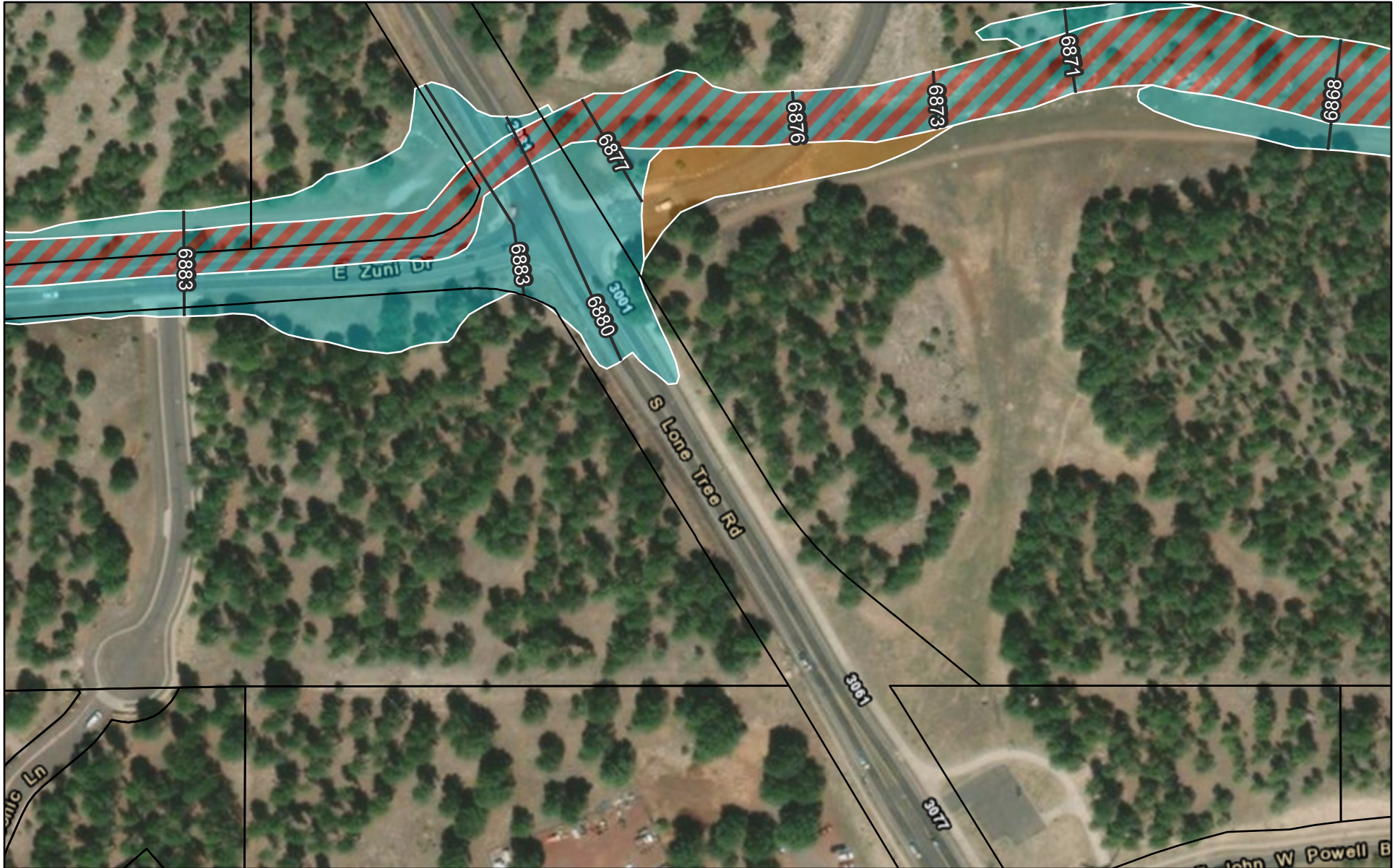
- |   |  |   |                                   |   |          |
|---|--|---|-----------------------------------|---|----------|
|  | Estuarine and Marine Deepwater                         |  | Freshwater Emergent Wetland       |  | Lake     |
|  | Estuarine and Marine Wetland<br>S. Lone Tree PEL Study |  | Freshwater Forested/Shrub Wetland |  | Other    |
|   |  |  | Freshwater Pond                   |  | Riverine |

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

**APPENDIX D:**  
**100 Year Floodplain**

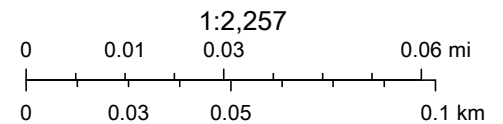


# ArcGIS Web Map



10/19/2022, 10:25:22 AM

- |                              |                                      |                                |
|------------------------------|--------------------------------------|--------------------------------|
| NFHL FIRM Panels             | County Boundary                      | <b>NFHL Flood Hazard Zones</b> |
| NFHL Base Flood Elevations   | Coconino County Parcels              | 1% Annual Chance Flood Hazard  |
| NFHL Flood Hazard Boundaries | Coconino County Municipal Boundaries | Regulatory Floodway            |
- S. Lone Tree PEL Study



County of Yavapai, Esri, HERE, GeoTechnologies, Inc., Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA,

**APPENDIX E:**  
**Nationwide Permit 14**

## Stephanie Treptow

---

**From:** Carpenter, Anne Therese (Therese) CIV USARMY CESPL (USA)  
<Anne.T.Carpenter@usace.army.mil>  
**Sent:** Thursday, October 20, 2022 8:32 AM  
**To:** Stephanie Treptow  
**Subject:** RE: Guidance on Lone Tree Road and Bow and Arrow Wash, Flagstaff AZ  
**Attachments:** NWP14\_Enclosure.pdf; Eng\_Form\_6082\_2019Oct\_Printed.pdf

Good morning Stephanie,

Thank you for reaching out to me by email. I've been in the field quite a bit lately, and this is a much more flexible way for me to hear questions and respond. I actually permitted a project the City of Flagstaff to do channel maintenance at the culvert beneath Lone Tree four years ago. If conditions are met for NWP14, I see no reason that permit cannot be used if your impacts are below the ½ acre threshold. I've attached information on NWP14 and the PCN for reference purposes. I'll also provide links below for the forms. Of note, the DE made Form 6082 THE form for PCNs on Nationwides; all other permits use Form 4345.

Here are links to the online versions of each form.

### FORM NUMBERS AND TITLES:

ENG Form 4345, Application for Department of the Army Permit  
ENG Form 6082, Nationwide Permit Pre-Construction Notification (PCN)

**ENG FORM DATE:** 1 September 2022

### ENG FORM URL(s):

ENG Form 4345 URL: <https://www.publications.usace.army.mil/USACE-Publications/Engineer-Forms/u43543q/34333435/>

ENG Form 6082 URL: <https://www.publications.usace.army.mil/USACE-Publications/Engineer-Forms/u43543q/36303832/>

As a sidebar, while I cannot directly provide the information to you without a FOIA request, the City should have a copy of the permit for the Zuni Drive Improvements Project (Corps file number SPL-2018-00133) which may be helpful in your cursory reviews. 😊

Please reach out if you have additional questions or would like to set a meeting to discuss, and again, thank you for reaching out early on this!

All the best,

Therese Carpenter, Project Manager  
Regulatory Division, Arizona Branch  
Los Angeles District, U.S. Army Corps of Engineers  
[Anne.T.Carpenter@usace.army.mil](mailto:Anne.T.Carpenter@usace.army.mil)

Office: (602) 230-6952  
Government Mobile: (602) 621-7037

Please do not mail hard copy documents to any Regulatory staff or office. For further details on corresponding with us, please view our special public notice at:

[https://www.spl.usace.army.mil/Portals/17/docs/publicnotices/COVID19%20Regulatory\\_SPN.pdf?ver=2020-03-19-134532-833](https://www.spl.usace.army.mil/Portals/17/docs/publicnotices/COVID19%20Regulatory_SPN.pdf?ver=2020-03-19-134532-833)

Assist us in better serving you! Please complete our brief customer survey, located at the following link:

<https://regulatory.ops.usace.army.mil/customer-service-survey/>

---

**From:** Stephanie Treptow <STreptow@esmaz.com>

**Sent:** Tuesday, October 18, 2022 9:30 AM

**To:** Carpenter, Anne Therese (Therese) CIV USARMY CESPL (USA) <Anne.T.Carpenter@usace.army.mil>

**Cc:** Stephanie Treptow <STreptow@esmaz.com>

**Subject:** [URL Verdict: Neutral][Non-DoD Source] Guidance on Lone Tree Road and Bow and Arrow Wash, Flagstaff AZ

Hi Therese,

I left you a voice message earlier regarding Lone Tree Road Improvements and Bow and Arrow Wash in Flagstaff, AZ. Attached is a map of the study area for the grant application to widen Lone Tree Road to include bike lanes and improve the intersections of Lone Tree Road and Zuni Drive and of Lone Tree Road and J.W. Powell Blvd. I am also attaching some maps I downloaded from ADEQ and National Wetlands Database. This information is being collected in a cursory level to determine potential issues that may arise if/when they receive FHWA grant funds to construct. I would appreciate any information you may be able to provide on the current status of the wash, potential issues, and if a Nationwide permit (14?) may be applicable if conditions can be met. I understand if the information you provide is more guidance oriented. I truly appreciate any information you may be able to provide. If you have any questions or concerns, please feel free to contact me at (928) 606-0519 or via email.

Many thanks,

---

**STEPHANIE TREPTOW**

Principal

**EnviroSystems Management, Inc.**



<http://esmaz.com>

23 East Fine Avenue

Flagstaff, Arizona 86001

(928) 226-0236 Office

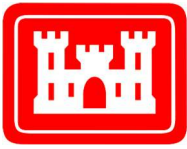
(928) 226-0237 Fax

(928) 606-0519 Mobile

[streptow@esmaz.com](mailto:streptow@esmaz.com)

*Her/She*





# NATIONWIDE PERMIT NUMBER 14

## Linear Transportation Projects

U.S. ARMY CORPS OF ENGINEERS  
LOS ANGELES DISTRICT  
Arizona Regulatory Branch

BUILDING STRONG®

### A. General Information

This document provides the terms and conditions of the nationwide permit (NWP) by combining information from (1) the terms and conditions of the NWP (<https://www.federalregister.gov/documents/2021/12/27/2021-27441/reissuance-and-modification-of-nationwide-permits>), (2) Regional conditions, and (3) the Clean Water Act Section 401 water quality certification decisions (401 WQCs). The NWP is in effect from February 25, 2022 through March 14, 2026 unless modified, reissued, or revoked before that time. It is incumbent upon the permittee to remain informed of changes to the NWPs.

Links to documents related to the NWP program may be found at <https://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/Nationwide-Permits/>

### Key Sections

B. Nationwide Permit Terms.....	1
C. Nationwide Permit General Conditions.....	2
D. District Engineer’s Decision.....	12
E. Further Information .....	13
F. Nationwide Permit Definitions .....	13
G. Nationwide Permit Regional Conditions (Arizona).....	16
H. 401 Water Quality Certification (401 WQC).....	17

### B. Nationwide Permit Terms

14. Linear Transportation Projects. Activities required for crossings of waters of the United States associated with the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, driveways, airport runways, and taxiways) in waters of the United States. For linear transportation projects in non-tidal waters, the discharge of dredged or fill material cannot cause the loss of greater than 1/2-acre of waters of the United States. For linear transportation projects in tidal waters, the discharge of dredged or fill material cannot cause the loss of greater than 1/3-acre of waters of the United States. Any stream channel modification, including bank stabilization, is limited to the minimum necessary to construct or protect the linear transportation project; such modifications must be in the immediate vicinity of the project.

This NWP also authorizes temporary structures, fills, and work, including the use of temporary mats, necessary to construct the linear transportation project. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges of dredged or fill material, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

This NWP cannot be used to authorize non-linear features commonly associated with transportation projects, such as vehicle maintenance or storage buildings, parking lots, train stations, or aircraft hangars.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) the loss of waters of the United States exceeds 1/10-acre; or (2) there is a discharge of dredged or

fill material in a special aquatic site, including wetlands. (See general condition 32.) (Authorities: Sections 10 and 404)

Note 1: For linear transportation projects crossing a single waterbody more than one time at separate and distant locations, or multiple waterbodies at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. Linear transportation projects must comply with 33 CFR 330.6(d).

Note 2: Some discharges of dredged or fill material for the construction of farm roads or forest roads, or temporary roads for moving mining equipment, may qualify for an exemption under Section 404(f) of the Clean Water Act (see 33 CFR 323.4).

Note 3: For NWP 14 activities that require pre-construction notification, the PCN must include any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings that require Department of the Army authorization but do not require pre-construction notification (see paragraph (b)(4) of general condition 32). The district engineer will evaluate the PCN in accordance with Section D, "District Engineer's Decision." The district engineer may require mitigation to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see general condition 23).

### **C. Nationwide Permit General Conditions**

**Note:** To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as applicable, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP. Every person who may wish to obtain permit authorization under one or more NWPs, or who is currently relying on an existing or prior permit authorization under one or more NWPs, has been and is on notice that all of the provisions of 33 CFR 330.1 through 330.6 apply to every NWP authorization. Note especially 33 CFR 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

**1. Navigation.** (a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his or her authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

**2. Aquatic Life Movements.** No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species. If a bottomless culvert cannot be used, then the crossing should be designed and constructed to minimize adverse effects to aquatic life movements.

**3. Spawning Areas.** Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

**4. Migratory Bird Breeding Areas.** Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

**5. Shellfish Beds.** No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.

**6. Suitable Material.** No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see section 307 of the Clean Water Act).

**7. Water Supply Intakes.** No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

**8. Adverse Effects From Impoundments.** If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

**9. Management of Water Flows.** To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

**10. Fills Within 100-Year Floodplains.** The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

**11. Equipment.** Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

**12. Soil Erosion and Sediment Controls.** Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow, or during low tides.

**13. Removal of Temporary Structures and Fills.** Temporary structures must be removed, to the maximum extent practicable, after their use has been discontinued. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

**14. Proper Maintenance.** Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

**15. Single and Complete Project.** The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

**16. Wild and Scenic Rivers.** (a) No NWP activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status.

(b) If a proposed NWP activity will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, the permittee must submit a pre-construction notification (see general condition 32). The district engineer will coordinate the PCN with the Federal agency with direct management responsibility for that river. Permittees shall not begin the NWP activity until notified by the district engineer that the Federal agency with direct management responsibility for that river has determined in writing that the proposed NWP activity will not adversely affect the Wild and Scenic River designation or study status.

(c) Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service). Information on these rivers is also available at: <http://www.rivers.gov/>.

**17. Tribal Rights.** No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

**18. Endangered Species.** (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify designated critical habitat or critical habitat proposed for such designation. No activity is authorized under any NWP which “may affect” a listed species or critical habitat, unless ESA section 7 consultation addressing the consequences of the proposed activity on listed species or critical habitat has been completed. See 50 CFR 402.02 for the definition of “effects of the action” for the purposes of ESA section 7 consultation, as well as 50 CFR 402.17, which provides further explanation under ESA section 7 regarding “activities that are reasonably certain to occur” and “consequences caused by the proposed action.”

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA (see 33 CFR 330.4(f)(1)). If pre-construction notification is required for the proposed activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation has not been submitted, additional ESA section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under section 7 of the ESA.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat or critical habitat proposed for such designation, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation), the pre-construction notification must include the name(s) of the endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or that utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. The district engineer will determine whether the proposed activity “may affect” or will have “no effect” to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps’ determination within 45 days of receipt of a complete pre-construction notification. For activities where the non-Federal applicant has identified listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) that might be affected or is in the vicinity of the activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification that the proposed activity will have “no effect” on listed species (or species proposed for listing or designated critical habitat (or critical habitat proposed for such designation), or until ESA section 7 consultation or conference has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(d) As a result of formal or informal consultation or conference with the FWS or NMFS the district engineer may add species-specific permit conditions to the NWPs.

(e) Authorization of an activity by an NWP does not authorize the “take” of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with “incidental take” provisions, etc.) from the FWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where “take” means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word “harm” in the definition of “take” means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

(f) If the non-federal permittee has a valid ESA section 10(a)(1)(B) incidental take permit with an approved Habitat Conservation Plan for a project or a group of projects that includes the proposed NWP activity, the non-federal applicant should provide a copy of that ESA section 10(a)(1)(B) permit with the PCN required by paragraph (c) of this general condition. The district engineer will coordinate with the agency that issued the ESA section 10(a)(1)(B) permit to determine whether the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation conducted for the ESA section 10(a)(1)(B) permit. If that coordination results in concurrence from the agency that the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation for the ESA section 10(a)(1)(B) permit, the district engineer does not need to conduct a separate ESA section 7 consultation for the proposed NWP activity. The district engineer will notify



the non-federal applicant within 45 days of receipt of a complete pre-construction notification whether the ESA section 10(a)(1)(B) permit covers the proposed NWP activity or whether additional ESA section 7 consultation is required.

(g) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the FWS and NMFS or their world wide web pages at <http://www.fws.gov/> or <http://www.fws.gov/ipac> and <http://www.nmfs.noaa.gov/pr/species/esa/> respectively.

**19. Migratory Birds and Bald and Golden Eagles.** The permittee is responsible for ensuring that an action authorized by an NWP complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting the appropriate local office of the U.S. Fish and Wildlife Service to determine what measures, if any, are necessary or appropriate to reduce adverse effects to migratory birds or eagles, including whether "incidental take" permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.

**20. Historic Properties.** (a) No activity is authorized under any NWP which may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)(1)). If pre-construction notification is required for the proposed NWP activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with section 106.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the NWP activity might have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties might have the potential to be affected by the proposed NWP activity or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of, or potential for, the presence of historic properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal representative, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts commensurate with potential impacts, which may include background research, consultation, oral history interviews, sample field investigation, and/or field survey. Based on the information submitted in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause effects on the historic properties. Section 106 consultation is not required when the district engineer determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 consultation is required when the district engineer determines that the activity has the potential to cause effects on historic properties. The district engineer will conduct consultation with consulting parties identified under 36 CFR 800.2(c) when he or she makes any of the following effect determinations for the purposes of section 106 of the NHPA: no historic properties affected, no adverse effect, or adverse effect.

(d) Where the non-Federal applicant has identified historic properties on which the proposed NWP activity might have the potential to cause effects and has so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects to historic properties or that NHPA section 106 consultation has been completed. For non-federal permittees, the district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA section 106 consultation is required. If NHPA section 106 consultation is required, the district engineer will notify the non-Federal applicant that he or she cannot begin the activity until section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(e) Prospective permittees should be aware that section 110k of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after

consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

**21. Discovery of Previously Unknown Remains and Artifacts.** Permittees that discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by an NWP, they must immediately notify the district engineer of what they have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal, and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

**22. Designated Critical Resource Waters.** Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, 52, 57 and 58 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed by permittees in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after she or he determines that the impacts to the critical resource waters will be no more than minimal.

**23. Mitigation.** The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects.

(d) Compensatory mitigation at a minimum one-for-one ratio will be required for all losses of stream bed that exceed 3/100-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. This compensatory mitigation requirement may be satisfied through the restoration or enhancement of riparian areas next to streams in accordance with paragraph (e) of this general condition. For losses of stream bed of 3/100-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through

stream rehabilitation, enhancement, or preservation, since streams are difficult-to-replace resources (see 33 CFR 332.3(e)(3)).

(e) Compensatory mitigation plans for NWP activities in or near streams or other open waters will normally include a requirement for the restoration or enhancement, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, the restoration or maintenance/protection of riparian areas may be the only compensatory mitigation required. If restoring riparian areas involves planting vegetation, only native species should be planted. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of minimization or compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(f) Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

(1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the NWPs, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 CFR 332.3(b)(2) and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the district engineer may approve the use of permittee-responsible mitigation.

(2) The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f).)

(3) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation.

(4) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)). If permittee-responsible mitigation is the proposed option, and the proposed compensatory mitigation site is located on land in which another federal agency holds an easement, the district engineer will coordinate with that federal agency to determine if proposed compensatory mitigation project is compatible with the terms of the easement.

(5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan needs to address only the baseline conditions at the impact site and the number of credits to be provided (see 33 CFR 332.4(c)(1)(ii)).

(6) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan (see 33 CFR 332.4(c)(1)(ii)).

(g) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any NWP activity resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that an NWP activity already meeting the established acreage limits also satisfies the no more than minimal impact requirement for the NWPs.

(h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.

(i) Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse environmental effects of the activity to the no more than minimal level.

**24. Safety of Impoundment Structures.** To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state or federal, dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

**25. Water Quality.** (a) Where the certifying authority (state, authorized tribe, or EPA, as appropriate) has not previously certified compliance of an NWP with CWA section 401, a CWA section 401 water quality certification for the proposed discharge must be obtained or waived (see 33 CFR 330.4(c)). If the permittee cannot comply with all of the conditions of a water quality certification previously issued by certifying authority for the issuance of the NWP, then the permittee must obtain a water quality certification or waiver for the proposed discharge in order for the activity to be authorized by an NWP.

(b) If the NWP activity requires pre-construction notification and the certifying authority has not previously certified compliance of an NWP with CWA section 401, the proposed discharge is not authorized by an NWP until water quality certification is obtained or waived. If the certifying authority issues a water quality certification for the proposed discharge, the permittee must submit a copy of the certification to the district engineer. The discharge is not authorized by an NWP until the district engineer has notified the permittee that the water quality certification requirement has been satisfied by the issuance of a water quality certification or a waiver.

(c) The district engineer or certifying authority may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

**26. Coastal Zone Management.** In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). If the permittee cannot comply with all of the conditions of a coastal zone management consistency concurrence previously issued by the state, then the permittee must obtain an individual coastal zone management consistency concurrence or presumption of concurrence in order for the activity to be authorized by an NWP. The district engineer or a state may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

**27. Regional and Case-By-Case Conditions.** The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its CWA section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

**28. Use of Multiple Nationwide Permits.** The use of more than one NWP for a single and complete project is authorized, subject to the following restrictions:

(a) If only one of the NWPs used to authorize the single and complete project has a specified acreage limit, the acreage loss of waters of the United States cannot exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

(b) If one or more of the NWP's used to authorize the single and complete project has specified acreage limits, the acreage loss of waters of the United States authorized by those NWP's cannot exceed their respective specified acreage limits. For example, if a commercial development is constructed under NWP 39, and the single and complete project includes the filling of an upland ditch authorized by NWP 46, the maximum acreage loss of waters of the United States for the commercial development under NWP 39 cannot exceed 1/2-acre, and the total acreage loss of waters of United States due to the NWP 39 and 46 activities cannot exceed 1 acre.

**29. Transfer of Nationwide Permit Verifications.** If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:

"When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

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(Transferee)

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(Date)

**30. Compliance Certification.** Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and implementation of any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

(a) A statement that the authorized activity was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;

(b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(l)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and

(c) The signature of the permittee certifying the completion of the activity and mitigation.

The completed certification document must be submitted to the district engineer within 30 days of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later.

**31. Activities Affecting Structures or Works Built by the United States.** If an NWP activity also requires review by, or permission from, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally authorized Civil Works project (a "USACE project"), the prospective permittee must submit a pre-construction notification. See paragraph (b)(10) of general condition 32. An activity that requires section 408 permission and/or review is not authorized by an NWP until the appropriate Corps office issues the section 408 permission or completes its review to alter, occupy, or use the USACE project, and the district engineer issues a written NWP verification.

**32. Pre-Construction Notification.** (a) *Timing.* Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review

process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

(1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or

(2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or are in the vicinity of the activity, or to notify the Corps pursuant to general condition 20 that the activity might have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)) has been completed. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) *Contents of Pre-Construction Notification:* The PCN must be in writing and include the following information:

(1) Name, address and telephone numbers of the prospective permittee;

(2) Location of the proposed activity;

(3) Identify the specific NWP or NWP(s) the prospective permittee wants to use to authorize the proposed activity;

(4) (i) A description of the proposed activity; the activity's purpose; direct and indirect adverse environmental effects the activity would cause, including the anticipated amount of loss of wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; a description of any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed activity; and any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings for linear projects that require Department of the Army authorization but do not require pre-construction notification. The description of the proposed activity and any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or other mitigation measures.

(ii) For linear projects where one or more single and complete crossings require pre-construction notification, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic sites, and other waters for each single and complete crossing of those wetlands, other special aquatic sites, and other waters (including those single and complete crossings authorized by an NWP but do not require PCNs). This information will be used by the district engineer to evaluate the cumulative adverse environmental effects of the proposed linear project, and does not change those non-PCN NWP activities into NWP PCNs.

(iii) Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the activity and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);

(5) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial and intermittent streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. Furthermore, the 45-day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;

(6) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands or 3/100-acre of stream bed and a PCN is required, the prospective permittee must submit a statement describing how the mitigation

requirement will be satisfied, or explaining why the adverse environmental effects are no more than minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(7) For non-federal permittees, if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat (or critical habitat proposed for such designation), the PCN must include the name(s) of those endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with the Endangered Species Act;

(8) For non-federal permittees, if the NWP activity might have the potential to cause effects to a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, the PCN must state which historic property might have the potential to be affected by the proposed activity or include a vicinity map indicating the location of the historic property. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with section 106 of the National Historic Preservation Act;

(9) For an activity that will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, the PCN must identify the Wild and Scenic River or the “study river” (see general condition 16); and

(10) For an NWP activity that requires permission from, or review by, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, the pre-construction notification must include a statement confirming that the project proponent has submitted a written request for section 408 permission from, or review by, the Corps office having jurisdiction over that USACE project.

(c) *Form of Pre-Construction Notification:* The nationwide permit pre-construction notification form (Form ENG 6082) should be used for NWP PCNs. A letter containing the required information may also be used. Applicants may provide electronic files of PCNs and supporting materials if the district engineer has established tools and procedures for electronic submittals.

(d) *Agency Coordination:* (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity’s compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the activity’s adverse environmental effects so that they are no more than minimal.

(2) Agency coordination is required for: (i) all NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States; (ii) NWP 13 activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve discharges of dredged or fill material into special aquatic sites; and (iii) NWP 54 activities in excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low water line in tidal waters or the ordinary high water mark in the Great Lakes.

(3) When agency coordination is required, the district engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (FWS, state natural resource or water quality agency, EPA, and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to notify the district engineer via telephone, facsimile transmission, or e-mail that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse environmental effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity’s compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure that the net adverse environmental effects of the proposed activity are no more than minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies’ concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(4) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(5) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.

#### **D. District Engineer's Decision**

1. In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. If a project proponent requests authorization by a specific NWP, the district engineer should issue the NWP verification for that activity if it meets the terms and conditions of that NWP, unless he or she determines, after considering mitigation, that the proposed activity will result in more than minimal individual and cumulative adverse effects on the aquatic environment and other aspects of the public interest and exercises discretionary authority to require an individual permit for the proposed activity. For a linear project, this determination will include an evaluation of the single and complete crossings of waters of the United States that require PCNs to determine whether they individually satisfy the terms and conditions of the NWP(s), as well as the cumulative effects caused by all of the crossings of waters of the United States authorized by an NWP. If an applicant requests a waiver of an applicable limit, as provided for in NWPs 13, 36, or 54, the district engineer will only grant the waiver upon a written determination that the NWP activity will result in only minimal individual and cumulative adverse environmental effects.

2. When making minimal adverse environmental effects determinations the district engineer will consider the direct and indirect effects caused by the NWP activity. He or she will also consider the cumulative adverse environmental effects caused by activities authorized by an NWP and whether those cumulative adverse environmental effects are no more than minimal. The district engineer will also consider site specific factors, such as the environmental setting in the vicinity of the NWP activity, the type of resource that will be affected by the NWP activity, the functions provided by the aquatic resources that will be affected by the NWP activity, the degree or magnitude to which the aquatic resources perform those functions, the extent that aquatic resource functions will be lost as a result of the NWP activity (e.g., partial or complete loss), the duration of the adverse effects (temporary or permanent), the importance of the aquatic resource functions to the region (e.g., watershed or ecoregion), and mitigation required by the district engineer. If an appropriate functional or condition assessment method is available and practicable to use, that assessment method may be used by the district engineer to assist in the minimal adverse environmental effects determination. The district engineer may add case-specific special conditions to the NWP authorization to address site-specific environmental concerns.

3. If the proposed activity requires a PCN and will result in a loss of greater than 1/10-acre of wetlands or 3/100-acre of stream bed, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for NWP activities with smaller impacts, or for impacts to other types of waters. The district engineer will consider any proposed compensatory mitigation or other mitigation measures the applicant has included in the proposal in determining whether the net adverse environmental effects of the proposed activity are no more than minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse environmental effects are no more than minimal, after considering mitigation, the district engineer will notify the permittee and include any activity-specific conditions in the NWP verification the district engineer deems necessary. Conditions for compensatory mitigation requirements must comply with the appropriate provisions at 33 CFR 332.3(k). The district engineer must approve the final mitigation plan before the permittee commences work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the proposed compensatory mitigation plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure that the NWP activity results in no more than minimal adverse environmental effects. If the net adverse environmental effects of the NWP activity (after consideration of the mitigation proposal) are determined by the district engineer to be no more than minimal, the district engineer will provide a timely written response to the applicant. The response will state that the NWP activity can proceed under the terms and conditions of the NWP, including any activity-specific conditions added to the NWP authorization by the district engineer.

4. If the district engineer determines that the adverse environmental effects of the proposed activity are more than minimal, then the district engineer will notify the applicant either: (a) that the activity does not qualify for



authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (b) that the activity is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal; or (c) that the activity is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse environmental effects, the activity will be authorized within the 45-day PCN period (unless additional time is required to comply with general conditions 18, 20, and/or 31), with activity-specific conditions that state the mitigation requirements. The authorization will include the necessary conceptual or detailed mitigation plan or a requirement that the applicant submit a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal. When compensatory mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan or has determined that prior approval of a final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation.

### **E. Further Information**

1. District engineers have authority to determine if an activity complies with the terms and conditions of an NWP.
2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.
3. NWPs do not grant any property rights or exclusive privileges.
4. NWPs do not authorize any injury to the property or rights of others.
5. NWPs do not authorize interference with any existing or proposed Federal project (see general condition 31).

### **F. Nationwide Permit Definitions**

**Best management practices (BMPs):** Policies, practices, procedures, or structures implemented to mitigate the adverse environmental effects on surface water quality resulting from development. BMPs are categorized as structural or non-structural.

**Compensatory mitigation:** The restoration (re-establishment or rehabilitation), establishment (creation), enhancement, and/or in certain circumstances preservation of aquatic resources for the purposes of offsetting unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved.

**Currently serviceable:** Useable as is or with some maintenance, but not so degraded as to essentially require reconstruction.

**Direct effects:** Effects that are caused by the activity and occur at the same time and place.

**Discharge:** The term "discharge" means any discharge of dredged or fill material into waters of the United States.

**Ecological reference:** A model used to plan and design an aquatic habitat and riparian area restoration, enhancement, or establishment activity under NWP 27. An ecological reference may be based on the structure, functions, and dynamics of an aquatic habitat type or a riparian area type that currently exists in the region where the proposed NWP 27 activity is located. Alternatively, an ecological reference may be based on a conceptual model for the aquatic habitat type or riparian area type to be restored, enhanced, or established as a result of the proposed NWP 27 activity. An ecological reference takes into account the range of variation of the aquatic habitat type or riparian area type in the region.

**Enhancement:** The manipulation of the physical, chemical, or biological characteristics of an aquatic resource to heighten, intensify, or improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.

**Establishment (creation):** The manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist at an upland site. Establishment results in a gain in aquatic resource area.

High Tide Line: The line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.

Historic Property: Any prehistoric or historic district, site (including archaeological site), building, structure, or other object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria (36 CFR part 60).

Independent utility: A test to determine what constitutes a single and complete non-linear project in the Corps Regulatory Program. A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed even if the other phases were not built can be considered as separate single and complete projects with independent utility.

Indirect effects: Effects that are caused by the activity and are later in time or farther removed in distance, but are still reasonably foreseeable.

Loss of waters of the United States: Waters of the United States that are permanently adversely affected by filling, flooding, excavation, or drainage because of the regulated activity. The loss of stream bed includes the acres of stream bed that are permanently adversely affected by filling or excavation because of the regulated activity. Permanent adverse effects include permanent discharges of dredged or fill material that change an aquatic area to dry land, increase the bottom elevation of a waterbody, or change the use of a waterbody. The acreage of loss of waters of the United States is a threshold measurement of the impact to jurisdictional waters or wetlands for determining whether a project may qualify for an NWP; it is not a net threshold that is calculated after considering compensatory mitigation that may be used to offset losses of aquatic functions and services. Waters of the United States temporarily filled, flooded, excavated, or drained, but restored to pre-construction contours and elevations after construction, are not included in the measurement of loss of waters of the United States. Impacts resulting from activities that do not require Department of the Army authorization, such as activities eligible for exemptions under section 404(f) of the Clean Water Act, are not considered when calculating the loss of waters of the United States.

Navigable waters: Waters subject to section 10 of the Rivers and Harbors Act of 1899. These waters are defined at 33 CFR part 329.

Non-tidal wetland: A non-tidal wetland is a wetland that is not subject to the ebb and flow of tidal waters. Non-tidal wetlands contiguous to tidal waters are located landward of the high tide line (i.e., spring high tide line).

Open water: For purposes of the NWPs, an open water is any area that in a year with normal patterns of precipitation has water flowing or standing above ground to the extent that an ordinary high water mark can be determined. Aquatic vegetation within the area of flowing or standing water is either non-emergent, sparse, or absent. Vegetated shallows are considered to be open waters. Examples of "open waters" include rivers, streams, lakes, and ponds.

Ordinary High Water Mark: The term ordinary high water mark means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

Perennial stream: A perennial stream has surface water flowing continuously year-round during a typical year.

Practicable: Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.

Pre-construction notification: A request submitted by the project proponent to the Corps for confirmation that a particular activity is authorized by nationwide permit. The request may be a permit application, letter, or similar

document that includes information about the proposed work and its anticipated environmental effects. Pre-construction notification may be required by the terms and conditions of a nationwide permit, or by regional conditions. A pre-construction notification may be voluntarily submitted in cases where pre-construction notification is not required and the project proponent wants confirmation that the activity is authorized by nationwide permit.

**Preservation:** The removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

**Re-establishment:** The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions.

**Rehabilitation:** The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area.

**Restoration:** The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: re-establishment and rehabilitation.

**Riffle and pool complex:** Riffle and pool complexes are special aquatic sites under the 404(b)(1) Guidelines. Riffle and pool complexes sometimes characterize steep gradient sections of streams. Such stream sections are recognizable by their hydraulic characteristics. The rapid movement of water over a coarse substrate in riffles results in a rough flow, a turbulent surface, and high dissolved oxygen levels in the water. Pools are deeper areas associated with riffles. A slower stream velocity, a streaming flow, a smooth surface, and a finer substrate characterize pools.

**Riparian areas:** Riparian areas are lands next to streams, lakes, and estuarine-marine shorelines. Riparian areas are transitional between terrestrial and aquatic ecosystems, through which surface and subsurface hydrology connects riverine, lacustrine, estuarine, and marine waters with their adjacent wetlands, non-wetland waters, or uplands. Riparian areas provide a variety of ecological functions and services and help improve or maintain local water quality. (See general condition 23.)

**Shellfish seeding:** The placement of shellfish seed and/or suitable substrate to increase shellfish production. Shellfish seed consists of immature individual shellfish or individual shellfish attached to shells or shell fragments (i.e., spat on shell). Suitable substrate may consist of shellfish shells, shell fragments, or other appropriate materials placed into waters for shellfish habitat.

**Single and complete linear project:** A linear project is a project constructed for the purpose of getting people, goods, or services from a point of origin to a terminal point, which often involves multiple crossings of one or more waterbodies at separate and distant locations. The term "single and complete project" is defined as that portion of the total linear project proposed or accomplished by one owner/developer or partnership or other association of owners/developers that includes all crossings of a single water of the United States (i.e., a single waterbody) at a specific location. For linear projects crossing a single or multiple waterbodies several times at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. However, individual channels in a braided stream or river, or individual arms of a large, irregularly shaped wetland or lake, etc., are not separate waterbodies, and crossings of such features cannot be considered separately.

**Single and complete non-linear project:** For non-linear projects, the term "single and complete project" is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. A single and complete non-linear project must have independent utility (see definition of "independent utility"). Single and complete non-linear projects may not be "piecemealed" to avoid the limits in an NWP authorization.

**Stormwater management:** Stormwater management is the mechanism for controlling stormwater runoff for the purposes of reducing downstream erosion, water quality degradation, and flooding and mitigating the adverse effects of changes in land use on the aquatic environment.

**Stormwater management facilities:** Stormwater management facilities are those facilities, including but not limited to, stormwater retention and detention ponds and best management practices, which retain water for a period of

time to control runoff and/or improve the quality (i.e., by reducing the concentration of nutrients, sediments, hazardous substances and other pollutants) of stormwater runoff.

**Stream bed:** The substrate of the stream channel between the ordinary high water marks. The substrate may be bedrock or inorganic particles that range in size from clay to boulders. Wetlands contiguous to the stream bed, but outside of the ordinary high water marks, are not considered part of the stream bed.

**Stream channelization:** The manipulation of a stream's course, condition, capacity, or location that causes more than minimal interruption of normal stream processes. A channelized jurisdictional stream remains a water of the United States.

**Structure:** An object that is arranged in a definite pattern of organization. Examples of structures include, without limitation, any pier, boat dock, boat ramp, wharf, dolphin, weir, boom, breakwater, bulkhead, revetment, riprap, jetty, artificial island, artificial reef, permanent mooring structure, power transmission line, permanently moored floating vessel, piling, aid to navigation, or any other manmade obstacle or obstruction.

**Tidal wetland:** A tidal wetland is a jurisdictional wetland that is inundated by tidal waters. Tidal waters rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by other waters, wind, or other effects. Tidal wetlands are located channelward of the high tide line.

**Tribal lands:** Any lands title to which is either: 1) held in trust by the United States for the benefit of any Indian tribe or individual; or 2) held by any Indian tribe or individual subject to restrictions by the United States against alienation.

**Tribal rights:** Those rights legally accruing to a tribe or tribes by virtue of inherent sovereign authority, unextinguished aboriginal title, treaty, statute, judicial decisions, executive order or agreement, and that give rise to legally enforceable remedies.

**Vegetated shallows:** Vegetated shallows are special aquatic sites under the 404(b)(1) Guidelines. They are areas that are permanently inundated and under normal circumstances have rooted aquatic vegetation, such as seagrasses in marine and estuarine systems and a variety of vascular rooted plants in freshwater systems.

**Waterbody:** For purposes of the NWP, a waterbody is a "water of the United States." If a wetland is adjacent to a waterbody determined to be a water of the United States, that waterbody and any adjacent wetlands are considered together as a single aquatic unit (see 33 CFR 328.4(c)(2)).

## **G. Nationwide Permit Regional Conditions (Arizona)**

1. The permittee shall submit a pre-construction notification (PCN) for all 2021 NWPs, in accordance with General Condition 32, in the following circumstances:
  - a. Activities that would result in a loss\* of waters of the United States within all perennial and intermittent waterbodies and special aquatic sites. (Refer to Regional Condition 2 for restrictions in special aquatic sites within the state of Arizona.)
  - b. Activities resulting in a discharge of dredged or fill material in waters of the U.S. on Tribal Lands\*\*;
  - c. All waterbodies designated by the Arizona Department of Environmental Quality as Outstanding Arizona Waters (OAWs), within 1600 meters (or 1 mile) upstream and/or 800 meters (1/2 mile) downstream of a designated OAW, and on tributaries to OAWs within 1600 meters of the OAW (see <http://www.azdeq.gov/index.html>).
  - d. All waterbodies designated by the Arizona Department of Environmental Quality as 303(d)-impaired surface waters, within 1600 meters (or 1 mile) upstream and/or 800 meters (1/2 mile) downstream of a designated impaired surface water, and on tributaries to impaired waters within 1600 meters of the impaired water (see <http://www.azdeq.gov/index.html>).

2. All 2021 NWP's are revoked in the state of Arizona for activities in wetlands, mudflats, vegetated shallows, or riffle and pool complexes, as defined at 40 CFR Part 230.40-45, resulting in a loss\* of waters of the United States greater than 0.10 acre.

\* "Loss" means waters of the United States that are permanently adversely affected by filling, flooding, excavation, or drainage because of the regulated activity.

\*\*"Tribal Lands" refers to any lands title to which is either: 1) held in trust by the United States for the benefit of any Indian tribe or individual; or 2) held by any Indian tribe or individual subject to restrictions by the United States against alienation.

NOTE: Regional Conditions on the Navajo Nation may be found at [https://www.spa.usace.army.mil/Portals/16/docs/civilworks/regulatory/publicnotices/Navajo%20Nation/2021%20NWP%20Reissuance\\_Final%20Public%20Notice\\_Navajo%20Nation.pdf?ver=Y05br0lh59RLEwptpfmJOA%3d%3d](https://www.spa.usace.army.mil/Portals/16/docs/civilworks/regulatory/publicnotices/Navajo%20Nation/2021%20NWP%20Reissuance_Final%20Public%20Notice_Navajo%20Nation.pdf?ver=Y05br0lh59RLEwptpfmJOA%3d%3d).

#### **H. 401 Water Quality Certification (401 WQC)**

A 401 WQC is mandatory for any activity that requires a Clean Water Act Section 404 permit. A 401 WQC is required prior to discharging any dredged or fill material into a water of the United States. Only one of the following 401 WQCs listed below will apply to your project. The geographical location of your project will determine which 401 WQC is applicable. The 401 WQCs issued for this NWP will remain in effect through March 14, 2026.

On all "Non-Tribal Lands", lands that are not part of federally recognized Indian Reservation, the Arizona Department of Environmental Quality (ADEQ) is the agency responsible for issuing the 401 WQC.

On all "Tribal Lands", lands that are part of a federally recognized Indian Reservation, the U.S. Environmental Protection Agency (EPA) is responsible for issuing the 401 WQC except where EPA has delegated the 401 WQC authority.

If "Individual Certification" is required you must apply for, receive, and comply with the 401 WQC issued by ADEQ, EPA, or the appropriate Tribe.

#### **Non-tribal Lands - 401 ADEQ WQCs\***

Arizona Department of Environmental Quality Certified for all projects, except ADEQ requires that a project proponent submit an application to the department for a State WQC if the proposed activity will occur within the ordinary high water mark of any of the following waters: An outstanding Arizona water; an impaired water; a water that is listed as not-attaining; or a lake. This conditional certification, authorized under A.R.S. 49-202(C), is necessary to ensure the proposed activities will not cause or contribute to an exceedance in a surface water quality standard under Arizona Administrative Code R18-11.

#### **Tribal Lands - 401 WQCs**

Fort Apache Indian Reservation (White Mountain Apache Tribe):	Individual Certification waived for all projects.
Gila River Indian Community	Individual Certification required for all projects.
Hopi Indian Reservation (Hopi Tribe):	Individual Certification required for all projects.
Hualapai Indian Reservation (Hualapai Tribe):	Individual Certification waived for all projects.
San Carlos Apache Tribe	Individual Certification waived for all projects.
Navajo Indian Reservation (Navajo Nation):	Individual Certification required for all projects.
All other Indian Reservations (EPA):	Conditionally Certified.

## 401 WQC Contact Information

Arizona Department of Environmental Quality  
Water Quality Division  
110 West Washington Street  
Phoenix, Arizona 85007  
Phone: (602) 771-4409  
[401WQC@azdeq.gov](mailto:401WQC@azdeq.gov)  
<https://azdeq.gov/cwa401>

White Mountain Apache Tribe (Fort Apache Indian  
Reservation)  
Environmental Protection Office  
P.O. Box 816  
Fort Apache, AZ 85926  
Phone: (928) 338-4325  
<https://whitemountainapache.org/resources/>

Gila River Indian Community  
Department of Environmental Quality  
P.O. Box 97  
Sacaton, AZ 85147  
Phone: (520) 562-2234  
[www.gricdeq.org](http://www.gricdeq.org)

Hopi Tribe  
Water Resources Program  
P.O. Box 123  
Kykotsmovi, Arizona 86039  
Phone: (928) 734-3712  
<https://www.hopi-nsn.gov/tribal-services/department-natural-resources-2/water-resources/>

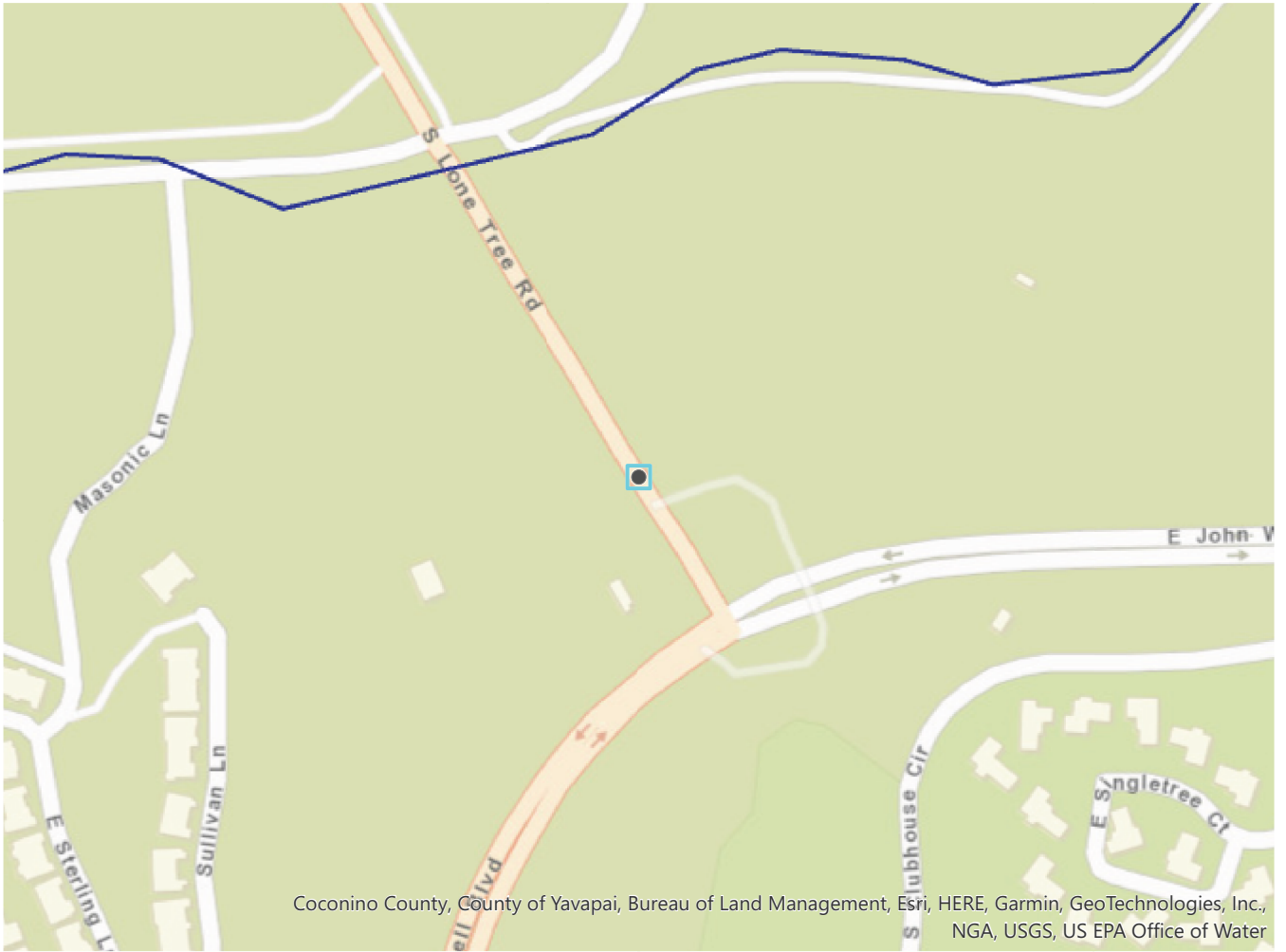
Hualapai Tribe  
Hualapai Department of Natural Resources  
P.O. Box 300  
Peach Springs, AZ 86434  
Phone: (928) 769-2254 x2255  
<http://hualapai-nsn.gov/services/natural-resources/>

Navajo Nation  
Navajo Nation Environmental Protection Agency  
PO Box 339  
Window Rock, AZ 86515  
Phone: (928) 871-7692  
<https://www.navajoepa.org/>

San Carlos Apache Tribe.  
Apache Gem Rd. Marker 2  
San Carlos, Arizona 85550  
[www.SanCarlosApache.com](http://www.SanCarlosApache.com)

U.S. Environmental Protection Agency  
Pacific Southwest, Region IX  
75 Hawthorne Street  
San Francisco, California 94105  
R9cwa401@epa.gov  
<https://www.epa.gov/>

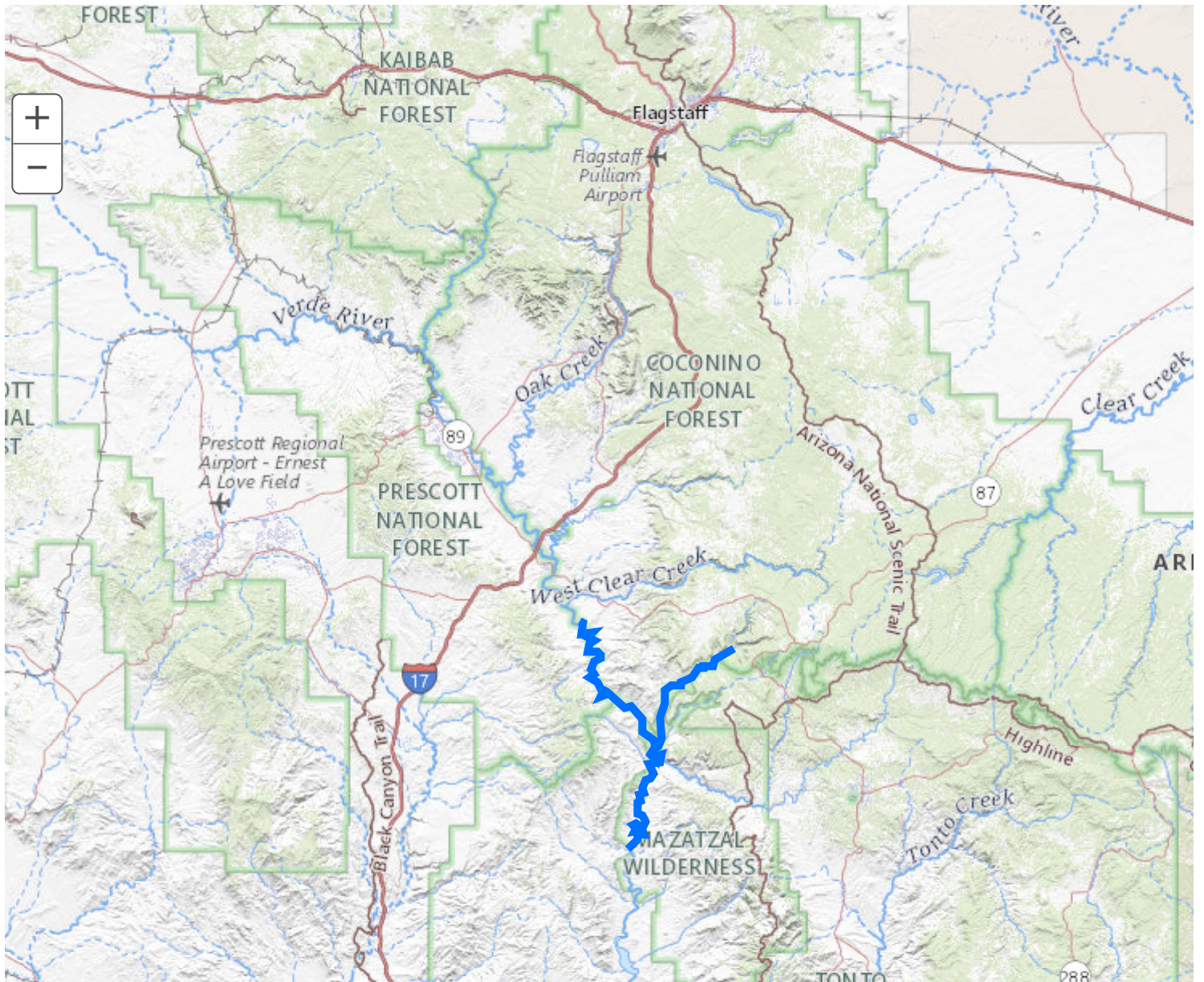
**APPENDIX F:**  
**Sole Source Aquifers**



Coconino County, County of Yavapai, Bureau of Land Management, Esri, HERE, Garmin, GeoTechnologies, Inc., NGA, USGS, US EPA Office of Water



**APPENDIX G:**  
**National Wild and Scenic Rivers**



**Legend** ↙

A legend box with a black border. It contains the word "Legend" in bold black text at the top left, followed by a small black arrow pointing down and to the left. Below the text is a solid blue horizontal line segment.

**APPENDIX H:**  
**Arizona Scenic Roads and Byways**



# Arizona Parkways, Historic and Scenic Roads



## Northern Region *Includes the counties of Coconino, Navajo and Apache*

Name of Scenic Road	Route	Milepost (MP)	State Designation	Date of Designation	Federal Designation	Date of Designation
Diné Tah "Among the People" Scenic Road	Navajo Routes 12 and 64	0.0 to 100.3	Scenic	6/15/01	---	---
Fredonia – Vermillion Cliffs Scenic Road	U.S. 89	MP 525.0 to MP 607.0	Scenic	6/28/96	---	---
Historic Route 66	B-40 - Williams	162.1 to MP 165.98 (Williams)	Historic	12/16/94	All-American Road	10/16/09
	U.S. 89, B-40, U.S. 180 - Flagstaff	MP 191.44 to MP 200.95 (Flagstaff)				
		MP 418.59 to MP 420.87 (Flagstaff)				
	Flagstaff City Highway - Walnut Canyon Road	Jct. U.S. 89 at MP 418.59 East to I-40 Exit 204				
	Coconino County Highway - Winona Road	Jct. U.S. 89 at MP 420.87 East to I-40 Exit 211				
	B-40 - Winslow	MP 251.9 to MP 257.41 (Winslow)				
	B-40 - Joseph City	MP 274.6 to MP 277.33 (Joseph City)				
	B-40 - Holbrook	MP 285.04 to MP 289.93 (Holbrook)				



**Northern Region** *Continued*

Name of Scenic Road	Route	Milepost (MP)	State Designation	Date of Designation	Federal Designation	Date of Designation
Kaibab Plateau – North Rim Parkway	S.R. 67	MP 580.0 to MP 610.3	Parkway	9/20/85	National Scenic Byway	6/9/98
Kayenta – Monument Valley Scenic Road	U.S. 163	MP 389.0 to MP 416.71	Scenic	6/28/96	---	---
Naat' tis' aan "Navajo Mountain" Scenic Road	S.R. 98	MP 302.0 to MP 360.0	Scenic	1/21/05	---	---
San Francisco Peaks Scenic Road	U.S. 180	MP 224.0 to MP 255.0	Scenic	3/16/90	---	---
Sedona – Oak Creek Canyon Scenic Road	S.R. 89A	MP 375.5 to MP 390.0	Scenic	8/24/84	---	---
Tse' nikani "Flat Mesa Rock" Scenic Road	U.S. 191	MP 467.0 to MP 510.4	Scenic	1/21/05	---	---
White Mountain Scenic Road	S.R. 260	MP 360.77 to MP 393.03	Scenic	1/15/93	---	---
	S.R. 261	MP 393.8 to MP 412.5				
	S.R. 273	MP 377.46 to MP 393.8				
White River Scenic Road	S.R. 73	MP 346.85 to MP 357.72	Scenic	1/15/93	---	---



**North Central Region** *Includes the counties of Yavapai, Gila, Graham and Greenlee*

Name of Scenic Road	Route	Milepost (MP)	State Designation	Date of Designation	Federal Designation	Date of Designation
Coronado Trail Scenic Road	U.S. 191	MP 172.0 to MP 253.74	Scenic	1/16/89	National Scenic Byway	9/22/05
	U.S. 180	MP 406.0 to MP 426.93				
Desert to Tall Pines Scenic Road	S.R. 288	MP 257.7 to MP 311.0	Scenic	7/13/01	---	---
	F.S. 512	MP 23.0 to MP 0.0				
Dry Creek Scenic Road	S.R. 89A	MP 363.5 to MP 370.0	Scenic	1/15/93	---	---
Jerome – Clarkdale – Cottonwood Historic Road	S.R. 89A	MP 343.5 to MP 348.0	Historic	1/15/93	---	---
	Main Street, Cottonwood	MP 348.0 to MP 353.5				
Joshua Forest Scenic Road	U.S. 93	MP 126.5 to MP 180.0	Scenic	1/15/93	---	---
Mingus Mountain Scenic Road	S.R. 89A	MP 332.0 to MP 343.5	Scenic	1/15/93	---	---
Red Rock Scenic Road	S.R. 179	MP 302.5 to MP 310.0	Scenic	2/20/87	All-American Road	9/22/05
Swift Trail Parkway	S.R. 366	MP 116.0 to MP 142.0	Parkway	1/15/93	---	---





**Phoenix and Central Region** *Includes the counties of Maricopa and Pinal*

Name of Scenic Road	Route	Milepost (MP)	State Designation	Date of Designation	Federal Designation	Date of Designation
Apache Trail Historic Road	S.R. 88	MP 201.0 to MP 242.5	Historic	6/20/86	---	---
Gila - Pinal Scenic Road	U.S. 60	MP 214.5 to MP 240.5	Scenic	6/20/86	---	---
Copper Corridor Scenic Road East	S.R. 77	MP 124.0 to MP 162.0	Scenic	10/17/08	---	---
Copper Corridor Scenic Road West	S.R. 177	MP 149.0 to MP 164.0	Scenic	10/17/08	---	---



**Tucson and Southern Region** *Includes the counties of Pima, Santa Cruz and Cochise*

Name of Scenic Road	Route	Milepost (MP)	State Designation	Date of Designation	Federal Designation	Date of Designation
Patagonia – Sonoita Scenic Road	S.R. 82	MP 4.5 to MP 32.0	Scenic	9/20/85	---	---
	S.R. 83	MP 33.0 to MP 58.0				
Organ Pipe Cactus Parkway	S.R. 85	MP 57.0 to MP 78.0	Parkway	12/19/08	---	---
Sky Island Parkway	F.S. 833	MP 0.0 to MP 25.0	Parkway	8/17/01	National Scenic Byway	9/22/05
	F.S. 10	MP 25.0 to MP 25.8				
	F.S. 11	MP 25.0 to MP 26.4				



**Arizona's West Coast Region** *Includes the counties of Mohave, La Paz and Yuma*

Name of Scenic Road	Route	Milepost (MP)	State Designation	Date of Designation	Federal Designation	Date of Designation
Historic Route 66	S.R. 66	MP 52.67 to MP 141.8 (Oatman to Seligman)	Historic	12/20/87	All-American Road	10/16/09
	Mohave County Highway	MP 0.0 to MP 23.7 (Golden Shores to Oatman)		3/18/88		
		MP 211.34 to MP 216.33 (Topock)				
	Yavapai County Highway	S. R. 66 at Seligman to I-40 Exit 139 (Crookton Road)		12/16/94		
	B-40 to Ashfork	MP 144.87 to MP 146.37 (Ashfork)				



## **What is a Scenic Road?**

A scenic road is a general term that is often used to refer to state-designated scenic roads and federally-designated byways. A scenic road is also a specific state designation to describe a certain type of roadway. The federal version of a scenic road is a byway.

## **State-Designated Scenic Roads**

### *Scenic Roads*

These roads include a roadway that:

- has a memorable visual impression,
- is free of visual encroachment, and
- forms a harmonious composite of visual patterns.

### *Historic Roads*

These roads include a roadway that:

- has historical importance to the cultural heritage of the state, nation, or region,
- contributes to a historical area or exploration/settlement of Arizona,
- is easily accessible, and
- has uniqueness.

### *Parkways*

These roads include a roadway that:

- meets scenic or historic roads criteria,
- has a one-mile minimum distance between access roads,
- allows visitor facilities/interpretive areas, and
- offers controlled access to adjacent development.

## **Federally-Designated Byways**

### *National Scenic Byways*

These roads includes a roadway that:

- should be a state-designated scenic road,
- accommodates bicycles and pedestrians,
- has a completed Corridor Management Plan,
- be continuous as possible, and
- possesses at least one of the six intrinsic qualities having regional significance: scenic, historic, recreational, cultural, archaeological, or natural.

### *All-American Roads*

These roads meet the criteria of a National Scenic Byway, with the following additional requirements and criteria:

- should accommodate tour buses,
- has user facilities, such as overlooks and food services,
- possesses at least two of the six intrinsic qualities having national significance, and
- be considered a destination unto itself.

**APPENDIX I:  
EDR Hazmat Report**

**Lone Tree**  
Lone Tree  
Flagstaff, AZ 86005

Inquiry Number: 7137095.2s  
October 03, 2022

## The EDR Radius Map™ Report





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Government Records Searched/Data Currency Tracking .....	GR-1

## GEOCHECK ADDENDUM

GeoCheck - Not Requested

***Thank you for your business.***  
Please contact EDR at 1-800-352-0050  
with any questions or comments.

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## EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E1527-21), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

### TARGET PROPERTY INFORMATION

#### ADDRESS

LONE TREE  
FLAGSTAFF, AZ 86005

#### COORDINATES

Latitude (North): 35.1669320 - 35° 10' 0.95"  
Longitude (West): 111.6463000 - 111° 38' 46.68"  
Universal Transverse Mercator: Zone 12  
UTM X (Meters): 441142.3  
UTM Y (Meters): 3891548.5  
Elevation: 6898 ft. above sea level

### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 11837611 FLAGSTAFF WEST, AZ  
Version Date: 2018  
  
East Map: 11837609 FLAGSTAFF EAST, AZ  
Version Date: 2018

### AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20150617  
Source: USDA

MAPPED SITES SUMMARY

Target Property Address:  
 LONE TREE  
 FLAGSTAFF, AZ 86001

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
<a href="#">A1</a>	PINE CANYON MAIN POO		EMAP	Higher	1 ft.
<a href="#">A2</a>	PINE CANYON - SPA	NO ADDRESS ON RECORD	FINDS	Higher	1 ft.
<a href="#">A3</a>	PINE CANYON MAIN POO	NO ADDRESS ON RECORD	FINDS	Higher	1 ft.
<a href="#">A4</a>	PINE CANYON - SPA		EMAP	Higher	1 ft.
<a href="#">B5</a>	CITY OF FLAGSTAFF WA		EMAP	Lower	1 ft.
<a href="#">B6</a>	CITY OF FLAGSTAFF MS		EMAP	Lower	1 ft.
<a href="#">B7</a>	CITY OF FLAGSTAFF MS		EMAP	Lower	1 ft.
<a href="#">8</a>	COCONINO COMMUNITY C	2800 S LONE TREE RD	EMAP, MANIFEST	Higher	562, 0.106, NNW

# EXECUTIVE SUMMARY

## TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

## DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

## STANDARD ENVIRONMENTAL RECORDS

### ***Lists of Federal NPL (Superfund) sites***

NPL..... National Priority List  
Proposed NPL..... Proposed National Priority List Sites  
NPL LIENS..... Federal Superfund Liens

### ***Lists of Federal Delisted NPL sites***

Delisted NPL..... National Priority List Deletions

### ***Lists of Federal sites subject to CERCLA removals and CERCLA orders***

FEDERAL FACILITY..... Federal Facility Site Information listing  
SEMS..... Superfund Enterprise Management System

### ***Lists of Federal CERCLA sites with NFRAP***

SEMS-ARCHIVE..... Superfund Enterprise Management System Archive

### ***Lists of Federal RCRA facilities undergoing Corrective Action***

CORRACTS..... Corrective Action Report

### ***Lists of Federal RCRA TSD facilities***

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

### ***Lists of Federal RCRA generators***

RCRA-LQG..... RCRA - Large Quantity Generators  
RCRA-SQG..... RCRA - Small Quantity Generators  
RCRA-VSQG..... RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

### ***Federal institutional controls / engineering controls registries***

LUCIS..... Land Use Control Information System

## EXECUTIVE SUMMARY

US ENG CONTROLS..... Engineering Controls Sites List  
US INST CONTROLS..... Institutional Controls Sites List

### ***Federal ERNS list***

ERNS..... Emergency Response Notification System

### ***Lists of state- and tribal (Superfund) equivalent sites***

AZ NPL..... NPL Detail Listing  
AZ WQARF..... Water Quality Assurance Revolving Fund Sites

### ***Lists of state- and tribal hazardous waste facilities***

SPL..... Superfund Program List  
SHWS..... ZipAcids List

### ***Lists of state and tribal landfills and solid waste disposal facilities***

SWF/LF..... Directory of Solid Waste Facilities

### ***Lists of state and tribal leaking storage tanks***

LUST..... Leaking Underground Storage Tank Listing  
INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

### ***Lists of state and tribal registered storage tanks***

FEMA UST..... Underground Storage Tank Listing  
UST..... Underground Storage Tank Listing  
AST..... List of Aboveground Storage Tanks  
INDIAN UST..... Underground Storage Tanks on Indian Land

### ***State and tribal institutional control / engineering control registries***

AZURITE..... Remediation and DEUR/VEMUR Tracking System  
AUL..... DEUR Database

### ***Lists of state and tribal voluntary cleanup sites***

INDIAN VCP..... Voluntary Cleanup Priority Listing  
VCP..... Voluntary Remediation Program Sites

### ***Lists of state and tribal brownfield sites***

BROWNFIELDS..... Brownfields Tracking System

### **ADDITIONAL ENVIRONMENTAL RECORDS**

#### ***Local Brownfield lists***

US BROWNFIELDS..... A Listing of Brownfields Sites

#### ***Local Lists of Landfill / Solid Waste Disposal Sites***

SWTIRE..... Solid Waste Tire Facilities



## EXECUTIVE SUMMARY

INDIAN ODI.....	Report on the Status of Open Dumps on Indian Lands
ODI.....	Open Dump Inventory
DEBRIS REGION 9.....	Torres Martinez Reservation Illegal Dump Site Locations
IHS OPEN DUMPS.....	Open Dumps on Indian Land

### **Local Lists of Hazardous waste / Contaminated Sites**

US HIST CDL.....	Delisted National Clandestine Laboratory Register
CDL.....	Clandestine Drug Labs
US CDL.....	National Clandestine Laboratory Register
PFAS.....	PFAS Contamination Site Listing
AQUEOUS FOAM.....	Aqueous Film Forming Foam Listing

### **Local Land Records**

LIENS 2.....	CERCLA Lien Information
--------------	-------------------------

### **Records of Emergency Release Reports**

HMIRS.....	Hazardous Materials Information Reporting System
SPILLS.....	Hazardous Material Logbook
SPILLS 90.....	SPILLS 90 data from FirstSearch

### **Other Ascertainable Records**

RCRA NonGen / NLR.....	RCRA - Non Generators / No Longer Regulated
FUDS.....	Formerly Used Defense Sites
DOD.....	Department of Defense Sites
SCRD DRYCLEANERS.....	State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR.....	Financial Assurance Information
EPA WATCH LIST.....	EPA WATCH LIST
2020 COR ACTION.....	2020 Corrective Action Program List
TSCA.....	Toxic Substances Control Act
TRIS.....	Toxic Chemical Release Inventory System
SSTS.....	Section 7 Tracking Systems
ROD.....	Records Of Decision
RMP.....	Risk Management Plans
RAATS.....	RCRA Administrative Action Tracking System
PRP.....	Potentially Responsible Parties
PADS.....	PCB Activity Database System
ICIS.....	Integrated Compliance Information System
FTTS.....	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS.....	Material Licensing Tracking System
COAL ASH DOE.....	Steam-Electric Plant Operation Data
COAL ASH EPA.....	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER.....	PCB Transformer Registration Database
RADINFO.....	Radiation Information Database
HIST FTTS.....	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS.....	Incident and Accident Data
CONSENT.....	Superfund (CERCLA) Consent Decrees
INDIAN RESERV.....	Indian Reservations
FUSRAP.....	Formerly Utilized Sites Remedial Action Program
UMTRA.....	Uranium Mill Tailings Sites
LEAD SMELTERS.....	Lead Smelter Sites

## EXECUTIVE SUMMARY

US AIRS.....	Aerometric Information Retrieval System Facility Subsystem
US MINES.....	Mines Master Index File
ABANDONED MINES.....	Abandoned Mines
DOCKET HWC.....	Hazardous Waste Compliance Docket Listing
UXO.....	Unexploded Ordnance Sites
ECHO.....	Enforcement & Compliance History Information
FUELS PROGRAM.....	EPA Fuels Program Registered Listing
AIRS.....	Arizona Airs Database
Aquifer.....	Aquifer Protection Permits List
AZ DOD.....	Department of Defense Sites
Dry Wells.....	Drywell Registration
DRYCLEANERS.....	Drycleaner Facility Listing
Enforcement.....	Enforcement and Violation Listing
Financial Assurance.....	Financial Assurance Information Listing
SPDES.....	NPDES
VAPOR.....	Vapor Intrusion
UIC.....	Underground Injection Control Wells
WWFAC.....	Waste Water Treatment Facilities
MINES MRDS.....	Mineral Resources Data System

### EDR HIGH RISK HISTORICAL RECORDS

#### ***EDR Exclusive Records***

EDR MGP.....	EDR Proprietary Manufactured Gas Plants
EDR Hist Auto.....	EDR Exclusive Historical Auto Stations
EDR Hist Cleaner.....	EDR Exclusive Historical Cleaners

### EDR RECOVERED GOVERNMENT ARCHIVES

#### ***Exclusive Recovered Govt. Archives***

RGA HWS.....	Recovered Government Archive State Hazardous Waste Facilities List
RGA LF.....	Recovered Government Archive Solid Waste Facilities List
RGA LUST.....	Recovered Government Archive Leaking Underground Storage Tank

### SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

# EXECUTIVE SUMMARY

## ADDITIONAL ENVIRONMENTAL RECORDS

### ***Other Ascertainable Records***

**FINDS:** The Facility Index System contains both facility information and "pointers" to other sources of information that contain more detail. These include: RCRIS; Permit Compliance System (PCS); Aerometric Information Retrieval System (AIRS); FATES (FIFRA [Federal Insecticide Fungicide Rodenticide Act] and TSCA Enforcement System, FTTS [FIFRA/TSCA Tracking System]; CERCLIS; DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes); Federal Underground Injection Control (FURS); Federal Reporting Data System (FRDS); Surface Impoundments (SIA); TSCA Chemicals in Commerce Information System (CICS); PADS; RCRA-J (medical waste transporters/disposers); TRIS; and TSCA. The source of this database is the U.S. EPA/NTIS.

A review of the FINDS list, as provided by EDR, and dated 05/13/2022 has revealed that there are 2 FINDS sites within approximately 0.001 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
PINE CANYON - SPA Registry ID:: 110039252279	NO ADDRESS ON RECORD	0 - 1/8 (0.000 mi.)	A2	8
PINE CANYON MAIN POO Registry ID:: 110039252331	NO ADDRESS ON RECORD	0 - 1/8 (0.000 mi.)	A3	8

**EMAP:** A listing of all places of interest to the Department of Environmental Quality, including air, waste and water sites.

A review of the EMAP list, as provided by EDR, and dated 06/22/2022 has revealed that there are 5 EMAP sites within approximately 0.001 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
PINE CANYON MAIN POO Facility Status: ACTIVE ID Number: 128109.00		0 - 1/8 (0.000 mi.)	A1	8
PINE CANYON - SPA Facility Status: ACTIVE ID Number: 130184.00		0 - 1/8 (0.000 mi.)	A4	9

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
CITY OF FLAGSTAFF WA Facility Status: ACTIVE ID Number: 196388.00		0 - 1/8 (0.000 mi.)	B5	9
CITY OF FLAGSTAFF MS Facility Status: ACTIVE ID Number: 192826.00		0 - 1/8 (0.000 mi.)	B6	10
CITY OF FLAGSTAFF MS Facility Status: ACTIVE ID Number: 191476.00		0 - 1/8 (0.000 mi.)	B7	10

## EXECUTIVE SUMMARY

MANIFEST: Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

A review of the MANIFEST list, as provided by EDR, and dated 12/31/2018 has revealed that there is 1 MANIFEST site within approximately 0.25 miles of the target property.

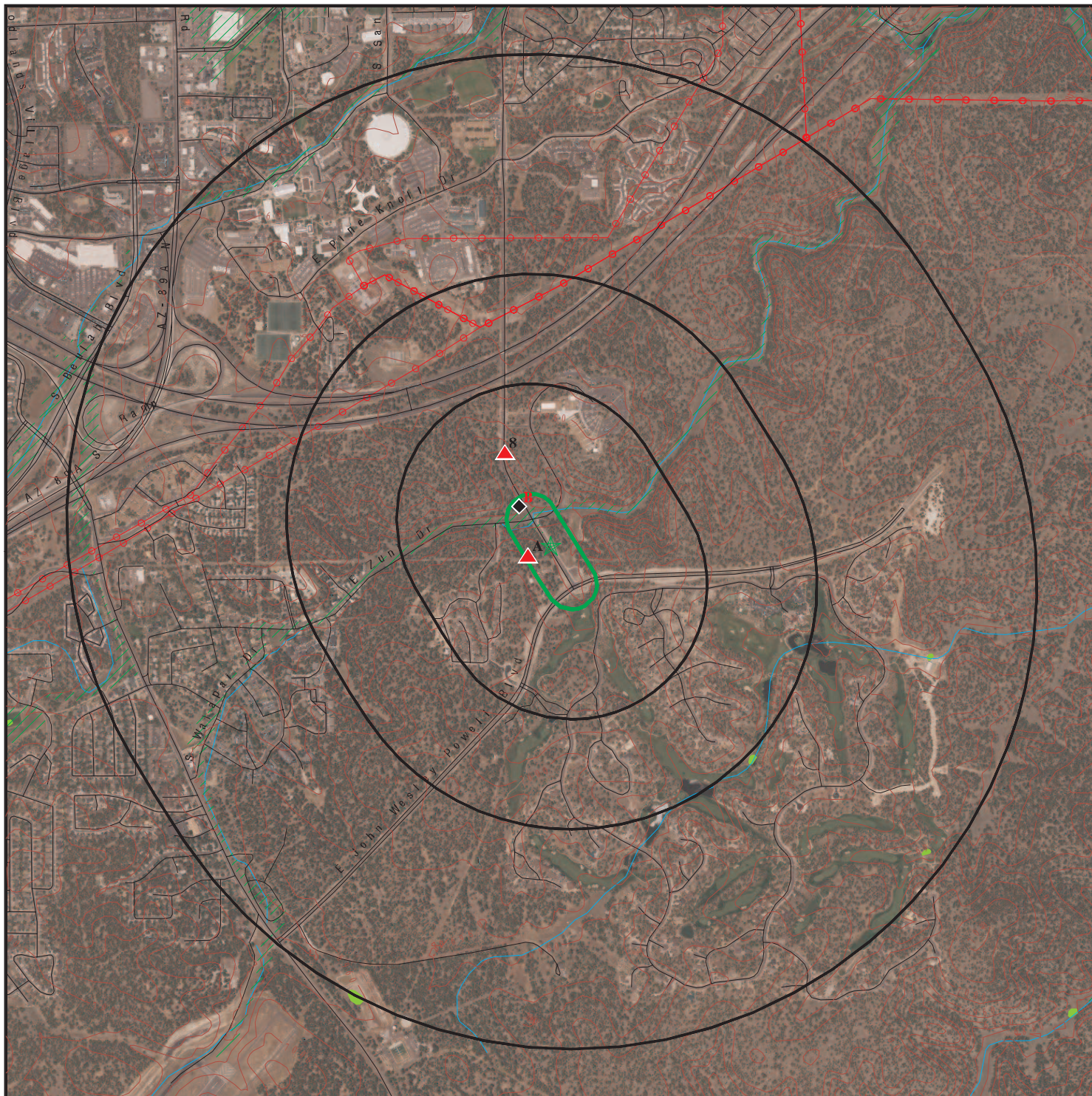
<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>COCONINO COMMUNITY C</b> EPA Id: CESQG	<b>2800 S LONE TREE RD</b>	<b>NNW 0 - 1/8 (0.106 mi.)</b>	<b>8</b>	<b>11</b>

## EXECUTIVE SUMMARY

There were no unmapped sites in this report.



# OVERVIEW MAP - 7137095.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites



Indian Reservations BIA

Power transmission lines

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

DOD Sites: AZ DEQ

Water Quality Assurance Revolving Fund Areas

AZ NPL



This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.








SITE NAME: Lone Tree  
 ADDRESS: Lone Tree  
 S. Flagstaff, AZ 86005  
 LAT/LONG: 35.166932 / 111.6463

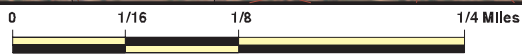
CLIENT: EnviroSystems Management, Inc.  
 CONTACT: Stephanie Treptow  
 INQUIRY #: 7137095.2s  
 DATE: October 03, 2022 8:09 pm










# DETAIL MAP - 7137095.2S



-  Target Property
-  Sites at elevations higher than or equal to the target property
-  Sites at elevations lower than the target property
-  Manufactured Gas Plants
-  Sensitive Receptors
-  National Priority List Sites
-  Dept. Defense Sites



-  Indian Reservations BIA
-  Power transmission lines
-  Special Flood Hazard Area (1%)
-  0.2% Annual Chance Flood Hazard

-  DOD Sites: AZ DEQ
-  Water Quality Assurance Revolving Fund Areas
-  AZ NPL



This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Lone Tree  
 ADDRESS: Lone Tree  
 S. Flagstaff, AZ 86005  
 LAT/LONG: 35.166932 / 111.6463

CLIENT: EnviroSystems Management, Inc.  
 CONTACT: Stephanie Treptow  
 INQUIRY #: 7137095.2s  
 DATE: October 03, 2022 8:09 pm

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<b>STANDARD ENVIRONMENTAL RECORDS</b>								
<b><i>Lists of Federal NPL (Superfund) sites</i></b>								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
<b><i>Lists of Federal Delisted NPL sites</i></b>								
Delisted NPL	1.000		0	0	0	0	NR	0
<b><i>Lists of Federal sites subject to CERCLA removals and CERCLA orders</i></b>								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
<b><i>Lists of Federal CERCLA sites with NFRAP</i></b>								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
<b><i>Lists of Federal RCRA facilities undergoing Corrective Action</i></b>								
CORRACTS	1.000		0	0	0	0	NR	0
<b><i>Lists of Federal RCRA TSD facilities</i></b>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<b><i>Lists of Federal RCRA generators</i></b>								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-VSQG	0.250		0	0	NR	NR	NR	0
<b><i>Federal institutional controls / engineering controls registries</i></b>								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
<b><i>Federal ERNS list</i></b>								
ERNS	0.001		0	NR	NR	NR	NR	0
<b><i>Lists of state- and tribal (Superfund) equivalent sites</i></b>								
AZ NPL	1.000		0	0	0	0	NR	0
AZ WQARF	1.000		0	0	0	0	NR	0
<b><i>Lists of state- and tribal hazardous waste facilities</i></b>								
SPL	1.000		0	0	0	0	NR	0
SHWS	1.000		0	0	0	0	NR	0
<b><i>Lists of state and tribal landfills and solid waste disposal facilities</i></b>								
SWF/LF	0.500		0	0	0	NR	NR	0

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<b><i>Lists of state and tribal leaking storage tanks</i></b>								
LUST	0.500		0	0	0	NR	NR	0
INDIAN LUST	0.500		0	0	0	NR	NR	0
<b><i>Lists of state and tribal registered storage tanks</i></b>								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
<b><i>State and tribal institutional control / engineering control registries</i></b>								
AZURITE	0.500		0	0	0	NR	NR	0
AUL	0.500		0	0	0	NR	NR	0
<b><i>Lists of state and tribal voluntary cleanup sites</i></b>								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
<b><i>Lists of state and tribal brownfield sites</i></b>								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
<b><u>ADDITIONAL ENVIRONMENTAL RECORDS</u></b>								
<b><i>Local Brownfield lists</i></b>								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
<b><i>Local Lists of Landfill / Solid Waste Disposal Sites</i></b>								
SWTIRE	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
<b><i>Local Lists of Hazardous waste / Contaminated Sites</i></b>								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
PFAS	0.500		0	0	0	NR	NR	0
AQUEOUS FOAM	0.500		0	0	0	NR	NR	0
<b><i>Local Land Records</i></b>								
LIENS 2	0.001		0	NR	NR	NR	NR	0
<b><i>Records of Emergency Release Reports</i></b>								
HMIRS	0.001		0	NR	NR	NR	NR	0
SPILLS	0.001		0	NR	NR	NR	NR	0

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
SPILLS 90	0.001		0	NR	NR	NR	NR	0
<b>Other Ascertainable Records</b>								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	0.001		2	NR	NR	NR	NR	2
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
AIRS	0.001		0	NR	NR	NR	NR	0
Aquifer	0.001		0	NR	NR	NR	NR	0
AZ DOD	0.500		0	0	0	NR	NR	0
Dry Wells	0.001		0	NR	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMAP	0.001		5	NR	NR	NR	NR	5
Enforcement	0.001		0	NR	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0
MANIFEST	0.250		1	0	NR	NR	NR	1
SPDES	0.001		0	NR	NR	NR	NR	0
VAPOR	0.500		0	0	0	NR	NR	0

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
UIC	0.001		0	NR	NR	NR	NR	0
WWFAC	0.500		0	0	0	NR	NR	0
MINES MRDS	0.001		0	NR	NR	NR	NR	0
<b><u>EDR HIGH RISK HISTORICAL RECORDS</u></b>								
<b><i>EDR Exclusive Records</i></b>								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
<b><u>EDR RECOVERED GOVERNMENT ARCHIVES</u></b>								
<b><i>Exclusive Recovered Govt. Archives</i></b>								
RGA HWS	0.001		0	NR	NR	NR	NR	0
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		0	8	0	0	0	0	8

**NOTES:**

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database



MAP FINDINGS

Map ID			EDR ID Number
Direction			EPA ID Number
Distance			
Elevation	Site	Database(s)	

---

<b>A1</b>	<b>PINE CANYON MAIN POOL</b>	<b>EMAP</b>	<b>S117609492</b>
			<b>N/A</b>

**< 1/8**  
**1 ft.**  
**FLAGSTAFF, AZ**  
**Site 1 of 4 in cluster A**

<b>Relative:</b>	EMAP:		
<b>Higher</b>	Name:	PINE CANYON MAIN POOL	
<b>Actual:</b>	Address:	Not reported	
<b>6918 ft.</b>	City, State, Zip:	FLAGSTAFF, AZ	
	ID Number:	128109.00	
	Township:	21N	
	Range:	7E	
	Section:	34	
	Quarter 1:	Not reported	
	Quarter 2:	Not reported	
	Quarter 3:	Not reported	
	Latitude:	35.17	
	Longitude:	-111.65	
	Collection Method:	PROVIDED BY OWNER/OPERATOR	
	Place Type:	SWIMMING POOL/SPA	
	Place Type Code:	SWMP	
	Place C Code:	RO	
	Facility Status:	ACTIVE	
	End Date:	Not reported	
	Verified:	Y	

<b>A2</b>	<b>PINE CANYON - SPA</b>	<b>FINDS</b>	<b>1012138516</b>
	<b>NO ADDRESS ON RECORD</b>		<b>N/A</b>

**< 1/8**  
**1 ft.**  
**FLAGSTAFF, AZ 86001**  
**Site 2 of 4 in cluster A**

<b>Relative:</b>	FINDS:		
<b>Higher</b>	Registry ID:	110039252279	
<b>Actual:</b>	Click Here for FRS Facility Detail Report:		
<b>6918 ft.</b>	Environmental Interest/Information System:		
	AZURITE (Arizona Unified Repository For Informational Tracking Of The Environment is the Arizona Department of Environmental Quality (ADEQ) database that is used for environmental enforcement and compliance reporting to the Permit and Compliance (PCS) system and to the Air Facility System Universal Interface (AFS-UI).		
	<a href="#">Click this hyperlink</a> while viewing on your computer to access additional FINDS: detail in the EDR Site Report.		

<b>A3</b>	<b>PINE CANYON MAIN POOL</b>	<b>FINDS</b>	<b>1012138573</b>
	<b>NO ADDRESS ON RECORD</b>		<b>N/A</b>

**< 1/8**  
**1 ft.**  
**FLAGSTAFF, AZ 86001**  
**Site 3 of 4 in cluster A**

<b>Relative:</b>	FINDS:		
<b>Higher</b>	Registry ID:	110039252331	
<b>Actual:</b>	Click Here for FRS Facility Detail Report:		
<b>6918 ft.</b>	Environmental Interest/Information System:		

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**PINE CANYON MAIN POOL (Continued)**

**1012138573**

AZURITE (Arizona Unified Repository For Informational Tracking Of The Environment) is the Arizona Department of Environmental Quality (ADEQ) database that is used for environmental enforcement and compliance reporting to the Permit and Compliance (PCS) system and to the Air Facility System Universal Interface (AFS-UI).

[Click this hyperlink](#) while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

**A4**

**PINE CANYON - SPA**

**EMAP S117609490  
N/A**

**< 1/8  
1 ft.**

**FLAGSTAFF, AZ**

**Site 4 of 4 in cluster A**

**Relative:  
Higher**

EMAP:

**Actual:  
6918 ft.**

Name: PINE CANYON - SPA  
Address: Not reported  
City,State,Zip: FLAGSTAFF, AZ  
ID Number: 130184.00  
Township: 21N  
Range: 7E  
Section: 34  
Quarter 1: Not reported  
Quarter 2: Not reported  
Quarter 3: Not reported  
Latitude: 35.17  
Longitude: -111.65  
Collection Method: PROVIDED BY OWNER/OPERATOR  
Place Type: SWIMMING POOL/SPA  
Place Type Code: SWMP  
Place C Code: RO  
Facility Status: ACTIVE  
End Date: Not reported  
Verified: Y

**B5**

**CITY OF FLAGSTAFF WATER SERVICES - DISCHARGE POINT**

**EMAP S125987254  
N/A**

**< 1/8  
1 ft.**

**, AZ**

**Site 1 of 3 in cluster B**

**Relative:  
Lower**

EMAP:

**Actual:  
6880 ft.**

Name: CITY OF FLAGSTAFF WATER SERVICES - DISCHARGE POINT LONETREE AT BOW AND ARROW  
Address: Not reported  
City,State,Zip: AZ  
ID Number: 196388.00  
Township: Not reported  
Range: Not reported  
Section: Not reported  
Quarter 1: Not reported  
Quarter 2: Not reported  
Quarter 3: Not reported  
Latitude: 35.17  
Longitude: -111.65  
Collection Method: PROVIDED BY OWNER/OPERATOR

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CITY OF FLAGSTAFF WATER SERVICES - DISCHARGE POINT LONETREE (Continued)**

**S125987254**

Place Type: STORMWATER DISCHARGE POINT  
Place Type Code: STWDP  
Place C Code: RO  
Facility Status: ACTIVE  
End Date: Not reported  
Verified: N

**B6 CITY OF FLAGSTAFF MS4 - OUTFALL 40033**

**EMAP S125408842**

**< 1/8  
1 ft.**

**, AZ**

**N/A**

**Site 2 of 3 in cluster B**

**Relative:** EMAP:  
**Lower** Name: CITY OF FLAGSTAFF MS4 - OUTFALL 40033  
**Actual:** Address: Not reported  
**6877 ft.** City,State,Zip: AZ  
ID Number: 192826.00  
Township: Not reported  
Range: Not reported  
Section: Not reported  
Quarter 1: Not reported  
Quarter 2: Not reported  
Quarter 3: Not reported  
Latitude: 35.17  
Longitude: -111.65  
Collection Method: PROVIDED BY OWNER/OPERATOR  
Place Type: STORMWATER DISCHARGE POINT  
Place Type Code: STWDP  
Place C Code: RO  
Facility Status: ACTIVE  
End Date: Not reported  
Verified: N

**B7 CITY OF FLAGSTAFF MS4 OUTFALL BOW AND ARROW**

**EMAP S125407934**

**< 1/8  
1 ft.**

**, AZ**

**N/A**

**Site 3 of 3 in cluster B**

**Relative:** EMAP:  
**Lower** Name: CITY OF FLAGSTAFF MS4 OUTFALL BOW AND ARROW  
**Actual:** Address: Not reported  
**6876 ft.** City,State,Zip: AZ  
ID Number: 191476.00  
Township: Not reported  
Range: Not reported  
Section: Not reported  
Quarter 1: Not reported  
Quarter 2: Not reported  
Quarter 3: Not reported  
Latitude: 35.17  
Longitude: -111.65  
Collection Method: PROVIDED BY OWNER/OPERATOR  
Place Type: STORMWATER DISCHARGE POINT  
Place Type Code: STWDP

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CITY OF FLAGSTAFF MS4 OUTFALL BOW AND ARROW (Continued)**

**S125407934**

Place C Code: RO  
Facility Status: ACTIVE  
End Date: Not reported  
Verified: N

**8  
NNW  
< 1/8  
0.106 mi.  
562 ft.**

**COCONINO COMMUNITY COLLEGE  
2800 S LONE TREE RD  
FLAGSTAFF, AZ 86005**

**EMAP S117592167  
MANIFEST N/A**

**Relative:  
Higher**

EMAP:

**Actual:  
6904 ft.**

Name: COCONINO COMMUNITY COLLEGE  
Address: 2800 S LONE TREE RD  
City,State,Zip: FLAGSTAFF, AZ 86005  
ID Number: 118497.00  
Township: Not reported  
Range: Not reported  
Section: Not reported  
Quarter 1: Not reported  
Quarter 2: Not reported  
Quarter 3: Not reported  
Latitude: 35.17  
Longitude: -111.65  
Collection Method: LOCATED FROM COUNTY PARCEL INFORMATION  
Place Type: COLLEGE OR UNIVERSITY  
Place Type Code: UNIV  
Place C Code: PP  
Facility Status: ACTIVE  
End Date: Not reported  
Verified: Y

AZ MANIFEST:

Name: COCONINO COMMUNITY COLLEGE  
Address: 2800 S LONE TREE RD  
City,State,Zip: FLAGSTAFF, AZ 86005  
Report Year: 2018  
EPA Id: CESQG  
Business Type: Not reported  
Mailing Address: Not reported  
Mailing State: Not reported  
Contact Name: Not reported  
Contact Phone: Not reported  
Management Methods: H141  
Date Generator Signed The Manifest: Not reported  
Transporter EPA Id Number: Not reported  
Date Transporter Signed The Manifest: Not reported  
TSD EPA Id Number: Not reported  
Volume: Not reported  
Date TSD Signed Manifest: Not reported  
DOT Id Number: UN2922  
Quantity: 50  
Waste Code 1: D002, D006, D00  
Waste Code 2: Not reported  
Waste Code 3: Not reported  
Waste Code 4: Not reported  
Waste Code 5: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**COCONINO COMMUNITY COLLEGE (Continued)**

**S117592167**

Waste Code 6:	Not reported
Waste Code 7:	Not reported
Waste Code 8:	Not reported
Waste Code 10:	Not reported
Waste Code 9:	Not reported
Waste Code 11:	Not reported
Waste Code 12:	Not reported
Waste Code 13:	Not reported

Count: 0 records.

ORPHAN SUMMARY

<u>City</u>	<u>EDR ID</u>	<u>Site Name</u>	<u>Site Address</u>	<u>Zip</u>	<u>Database(s)</u>
NO SITES FOUND					



**APPENDIX J:**  
**Cultural Resources Report**

MEMO TO FILE

Date: 1/11/23

RE: Cultural Resources Preliminary Reconnaissance Field Inspection

From: Stephanie Treptow, PM

For: MetroPlan South Lone Tree Corridor PEL Study Area

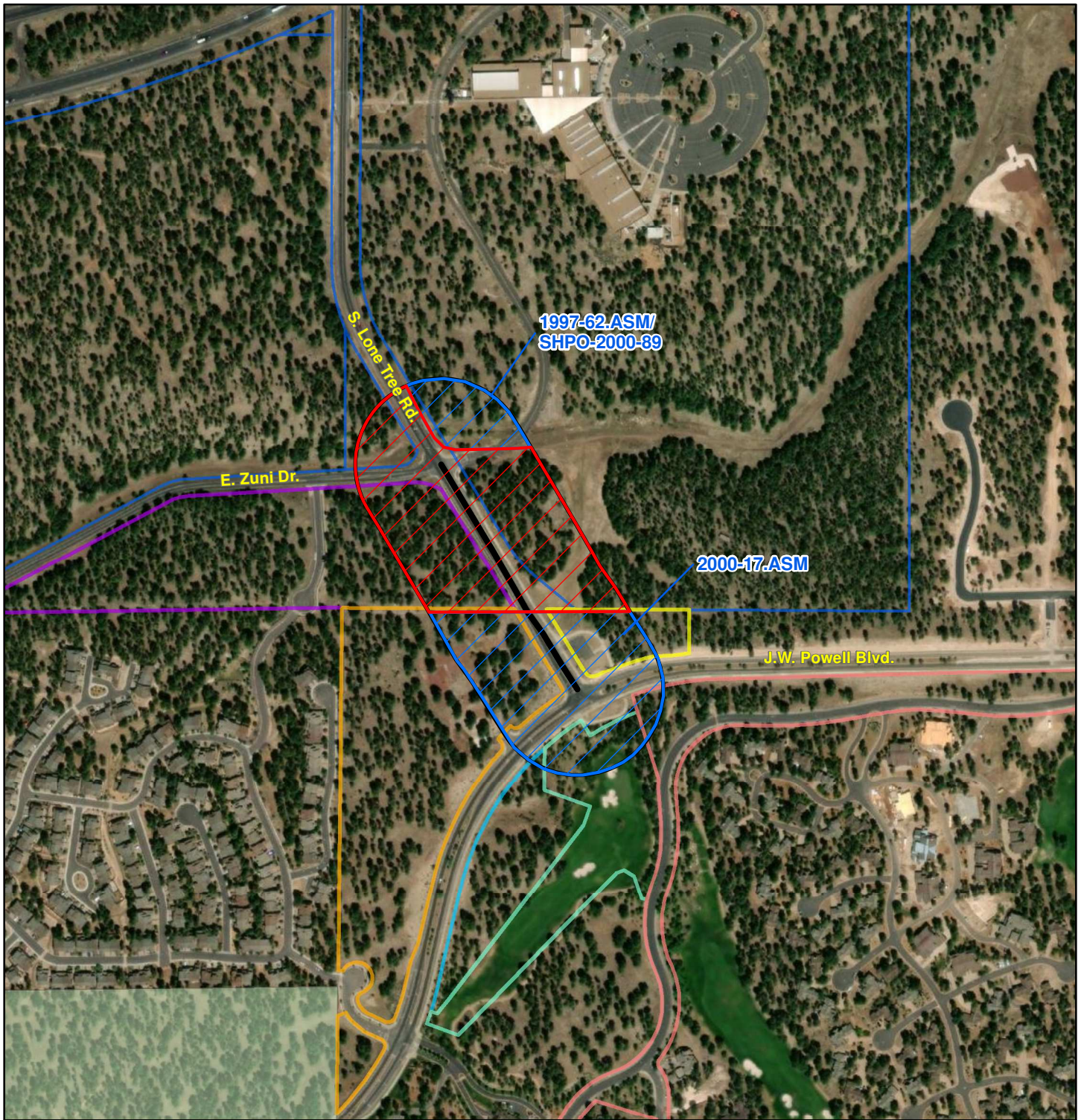
ESM Project No: 2163-22

A cursory review of AZsite indicated the entire project study area had been previously surveyed with the exception of a 9.88-acre portion. No archaeological resources were indicated in the project study area by the previous surveys.

**Cultural Resources Field Notes**

Following notification of the private landowners, EnviroSystems Management qualified archaeologist arrived at the project area around 1:30 pm on September 29, 2022. He proceeded to systematically inspect the 9.88-acre parcel of property not previously surveyed for cultural resources. Generally walking in a north and south direction spaced out in 20 meter transects, paying particular attention to flat areas and benches just above the main drainage. Overall visibility was less than 80%. Vegetation was typical for the flagstaff area with much of the ground covered in a thick layer of pine duff and other forest detritus interspersed with patches of bare dirt and bedrock outcroppings. The results of the survey yielded no cultural resources (see attached map).

If the South Lone Tree project receives funding and moves forward a full Class I and III survey and report will be completed and submitted to the proper agencies for review and approval.



**South Lone Tree Corridor**  
 EnviroSystems Project No. 2163-22  
**Project area, preliminary survey area, and previous cultural resources surveys.**

0 100 200 Meters

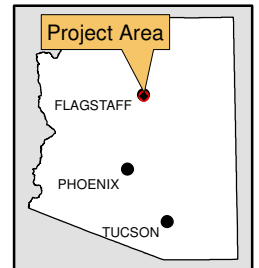
0 310 620 Feet



1:6,000

**Legend**

300-ft Buffer	Private
Preliminary survey area	USFS
Previous survey	

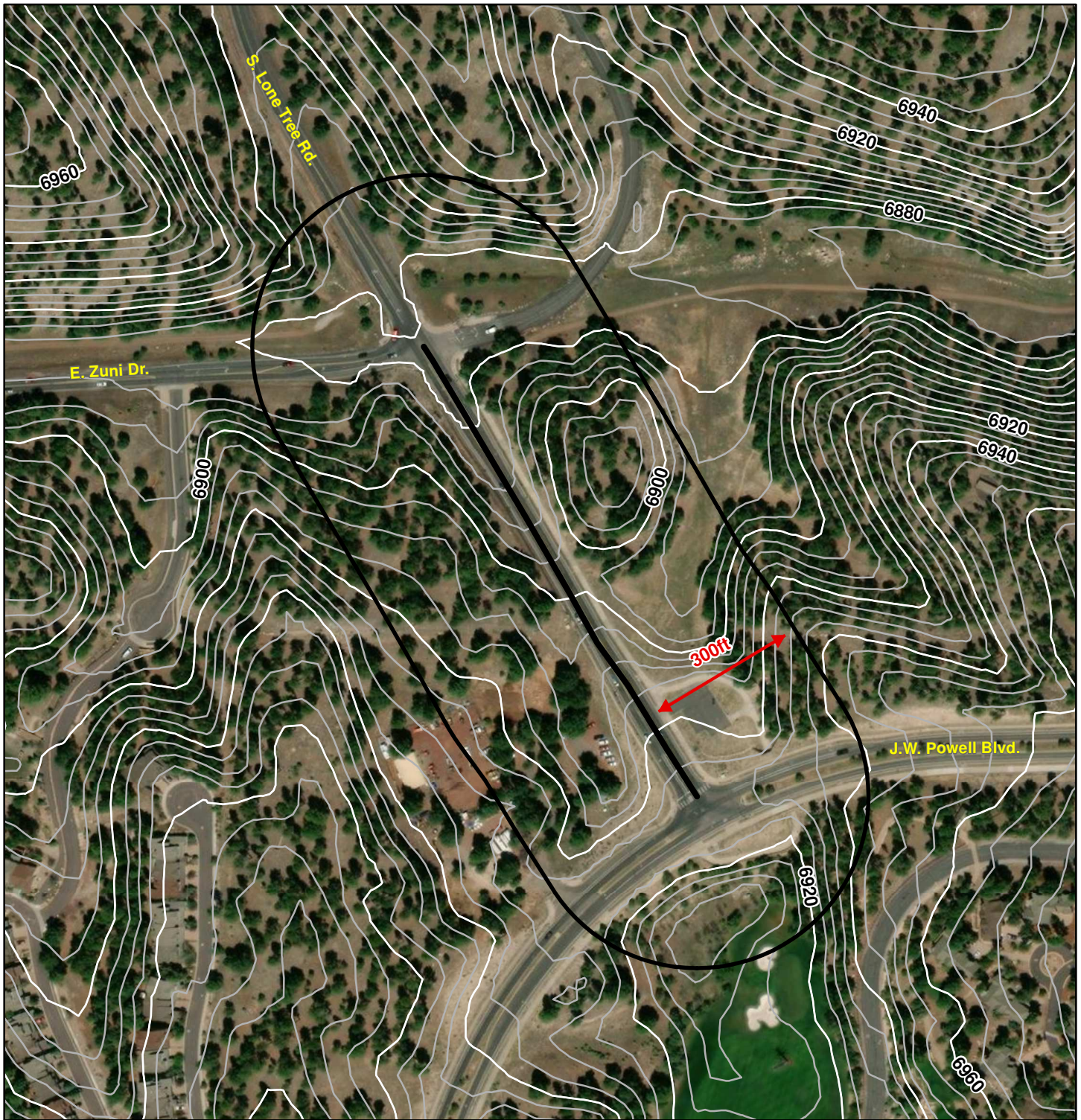


Base map is National Geographic Society, i-cubed (web accessed 2021).






**APPENDIX K:**  
**PEL Study Area Contours Map**

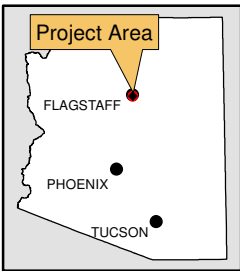


**South Lone Tree Corridor**  
 EnviroSystems Project No. 2163-21  
**Figure 2. Project area with contours.**




**Legend**  
 300-ft Buffer

Contour interval = 5ft



0 50 100 Meters  


0 150 300 Feet  


Base map is National Geographic Society, i-cubed (web accessed 2021).



**APPENDIX L:**  
**Survey Findings Report**





# Survey Report & Findings

South Lone Tree Planning & Environmental Linkages (PEL) Study

## Introduction

This survey is intended to capture the public's needs within the corridor study area. The survey was launched using the City of Flagstaff's Community Forum platform. The survey was conducted in November 2022. Twenty-seven (27) responses were received from 51 online visitors and 2 in-person surveys were collected at the open house event. The survey was composed of 13 questions, including one interactive mapping question. An opportunity to leave comments was provided in the survey. An announcement was made to the 3000+ registered site users at the beginning of the survey. The PEL website directed the public to the online survey, and 1053 postcards were sent to residents directly along an adjunct to the study area directing them to the online survey.

It is important to note that this is not a random sample survey, that results are not statistically valid, and that the results reported here have not been normalized to reflect a more normal distribution across demographic characteristics of the region.

## How This Information Will Be Used

Survey results will be used to shape future alternative designs for roadway expansion. In addition, it will be used to understand public transportation needs within the corridor, and support or opposition to future improvements. Knowing preferences and deterrents to different travel modes and their facilities allows us to design systems that capitalize and mitigate accordingly.

## Survey Findings

Findings show that most survey respondents frequently commute through or regularly walk, bike, or access the FUTS trail in the Study Area. The topics of pedestrians and bicycles, and safety ranked the highest in terms of concern and needs for improvements within the study area.

Safety concerns in the study area were centered around the intersection of Zuni and Lone Tree. When asked to rank the needs within the study area, *"to improve safety conditions for all road users"* ranked the highest at 80%. Comments around safety included the need for a signalized stop or roundabout at intersections and improved crossings for bicyclists and pedestrians. Speeding and the difficulty for drivers making a left turn from Zuni onto Lone Tree were also cited.

Pedestrian and Bicyclist needs ranked the highest in the comments and mapping exercise, and the second highest (60%) identified need in the study area. Comments included the need for improved connectivity through the Zuni intersection to access FUTS, improved on-roadway bicycle facilities, and the need for sidewalks along Zuni. Tied to both safety and pedestrians/bicyclist two (2) comments were received regarding ADA access crossing the intersection of Lone Tree and Zuni, and along Zuni.

Table 1 demonstrates the Title VI relevant groups that participated in this survey. These groups include Minority, Low Income (or low to moderate), Age 65 and older, and Disabled.

Table 1: Title VI Survey Group

ANALYSIS GROUP	NUMBER OF RESPONDENTS
ALL	25
AGE 65 AND OLDER	4
MINORITY	2
LOW AND MODERATE-INCOME (<\$49,900 ANNUAL)	1
LOW INCOME (< \$25,000 ANNUAL)	1

The following provides an overview of each survey question. Please note that the numbers listed are the percentage of respondents and not the total number of participants per group.

Q1: The elements below are Needs addressed in this study. Please rate how much you agree with the following statements (1 = least important, 5 = most important).

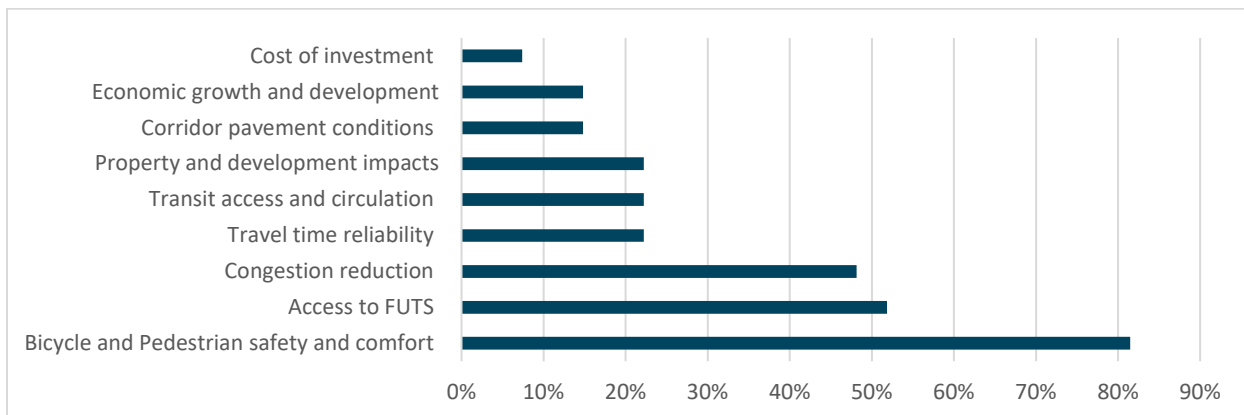
Improve safety conditions for all road users (80%) ranked as the highest need to address as the future design is considered. Followed by providing better auto, pedestrian, and bicycle connections (60%), and maintaining the rural character (52%).

	1 (LOWEST)	2	3	4	5 (HIGHEST)
TO PRIMARILY SUPPORT CONTINUED REGIONAL GROWTH AND DEVELOPMENT.	16%	20%	<b>32%</b>	16%	16%
TO SUPPORT THE NEW COMMUNITIES AND RESIDENTS ALONG J.W. POWELL BLVD.	12%	16%	28%	<b>32%</b>	12%
TO PROVIDE BETTER AUTO, PEDESTRIAN, AND BICYCLE CONNECTIONS	4%	8%	12%	16%	<b>60%</b>
TO MAINTAIN A RURAL CHARACTER	16%		16%	16%	<b>52%</b>
TO IMPROVE SAFETY CONDITIONS FOR ALL ROAD USERS		4%	16%		<b>80%</b>
FACILITIES AND EMERGENCY RESPONDERS		24%	16%	24%	<b>36%</b>

Questions 2 and 3 were related to the mapping exercise. Details and analysis are listed below.

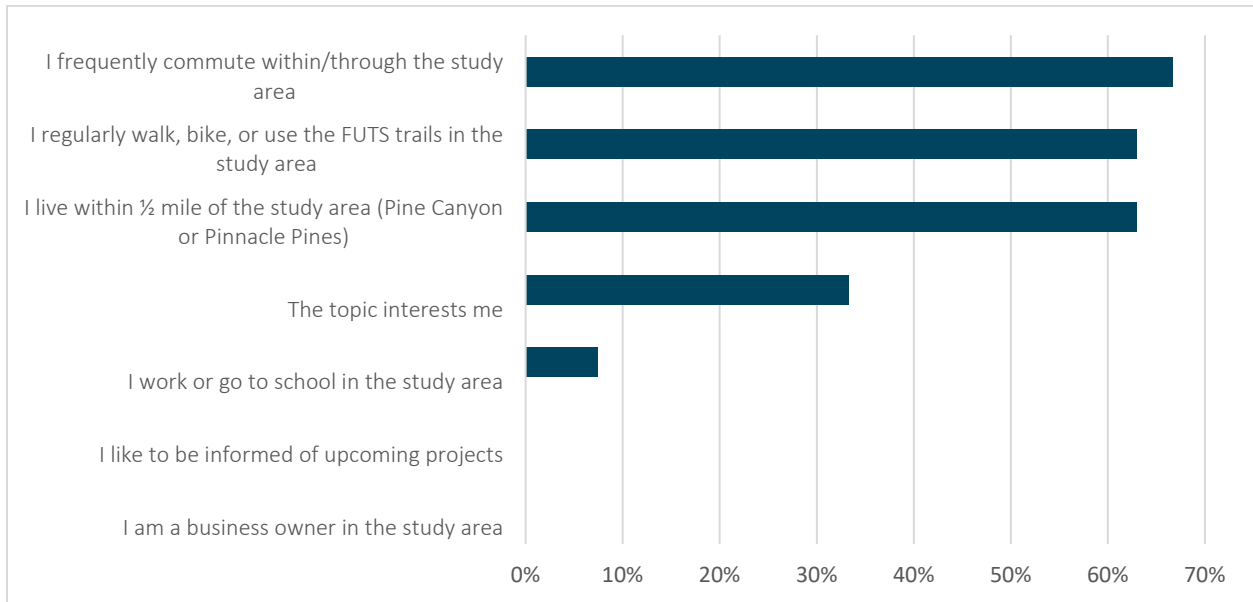
Q4: How should we evaluate future roadway design alternatives? Which criteria are most important to you? (Please choose your top 3)

When considering future roadway design, bicycle and pedestrian comfort ranked the highest at 81%, followed by access to the FUTS at 52%, and congestion reduction at 48%.



### Q5: Why is this project important to you? (Select all that apply)

The majority of respondents commute and live within the study area.



### Needs and Concerns Mapping Exercise

As part of the online survey and at the PEL Open House, a map was provided to participants that asked them to identify needs and concerns with the study area. The prompts were categorized into the following:

- Safety
- Flood/Drainage Issues
- Pedestrians & Bicyclists
- Pavement Conditions
- Wildlife Crossings
- Congestion/Traffic
- ADA Access

Participants could place unlimited pins onto the map using the above categories. They were further offered to provide direct comments on their pins explaining their concerns. A total of 92 pins were collected while only 58 were within the PEL Study Area boundary. For this study, we only assessed those pins and comments within the study area.

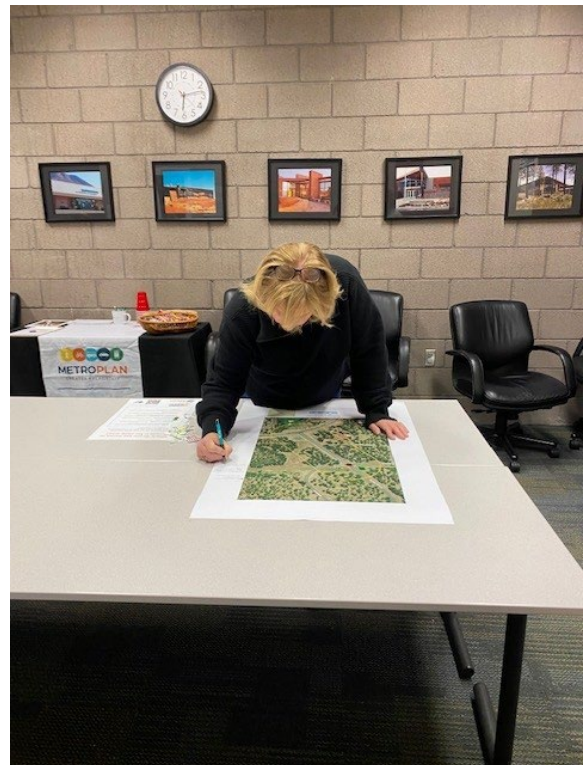
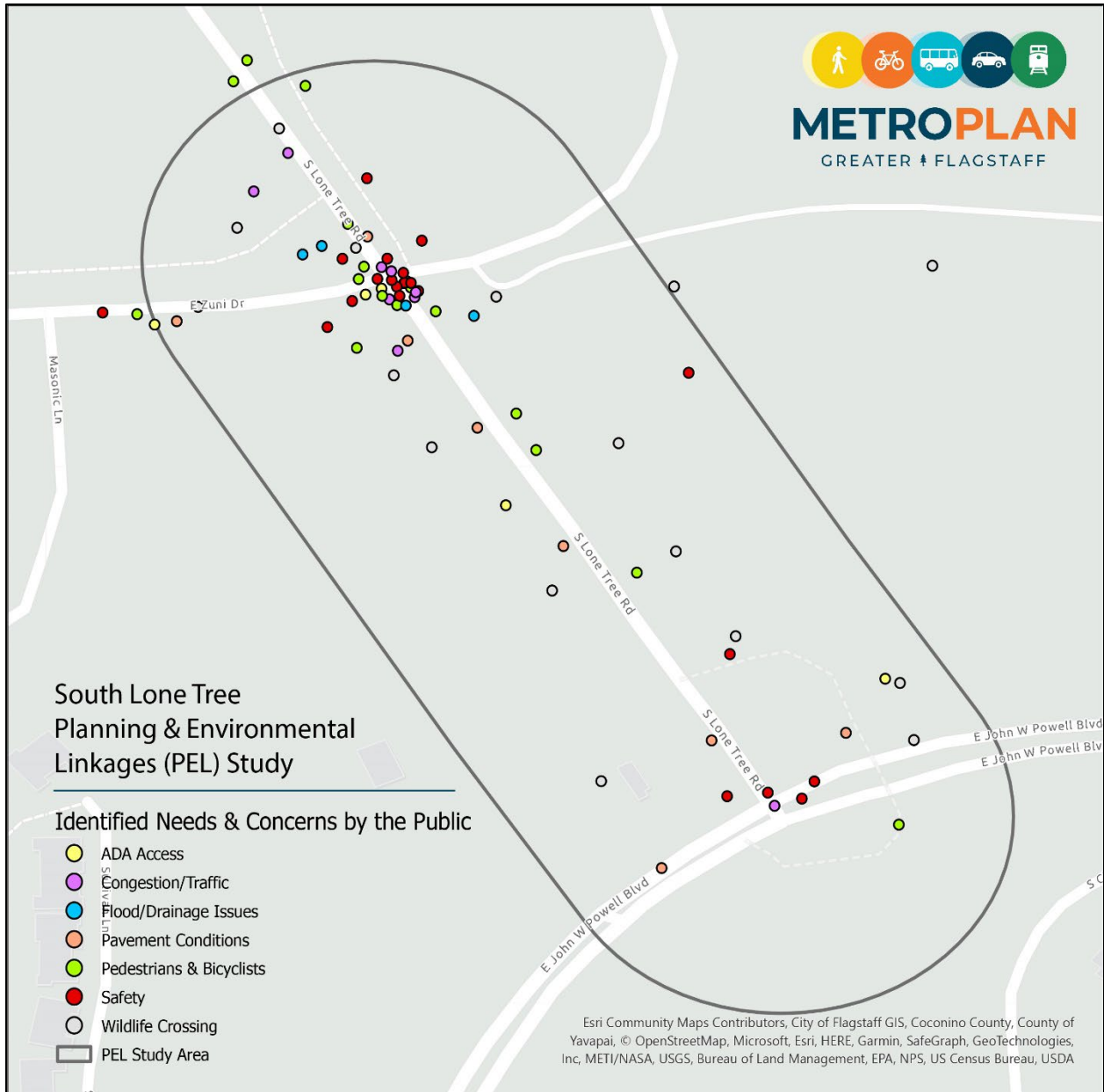


Figure 1: Results of online and in-person mapping



To view the interactive PEL map of the online pins and comments, please visit:

[https://www.google.com/maps/d/u/1/edit?mid=1KHGet\\_UDQSFQrjW1M133J2SsRmFeC7o&usp=sharing](https://www.google.com/maps/d/u/1/edit?mid=1KHGet_UDQSFQrjW1M133J2SsRmFeC7o&usp=sharing)

Table 2: Comments by category from mapping exercise

CATEGORY	PINS	COMMENTS
<b>Safety</b>	18	Excessive speed on both Lone Tree and JW Powell is a constant issue.
		A four way street light is needed at the intersection of JW Blvd and Zuni Drive.
		A stop light here would be ideal (Zuni and Lone Tree)
		This is a dangerous intersection at busy times and needs a roundabout or something for drivers to safely navigate the intersection. Also required is a safe way for bicyclists and pedestrians to get from the west side of Lonetree to the east side (Coconino Community College). I have seen many near crashes of all types at this location over the years.
		I believe this is one of the intersections that's rated highest for accidents. It is badly in need of a roundabout to control traffic and speeds on Lone Tree, particularly at rush hour and when the classes at the college let out.
		Difficult for vehicles to make left turns; difficult for bikes and peds to cross Lone Tree.
		Zuni/LT Dangerous intersection
		Speed issues, visual issues, and traffic impede the ability to turn.
<b>Pedestrians &amp; Bicyclists</b>	19	The pedestrian path on the east side of Lone Tree, while desperately needing patching to fill large cracks making cycling, especially on road bikes with skinny tires extremely challenging, is a great path that helps take much of the traffic off a very dangerous section of the road going under the I40= the lanes are very tight, making cycling very dangerous through here, but you see many people doing this. I would love to see the path go all the way down to Butler to help increase the paths use for accessing AZT and downtown access, that might help reduce vehicle traffic in town.
		I have no issues/concerns with the current road. I ride it frequently to get to Lake Mary Rd. I worry about bicycle safety if it becomes a major thoroughfare.
		Need sidewalks on East Zuni and better bike lanes on East Zuni and South Lone Tree. Also stop light at Zuni and Lone Tree intersection.
		Need sidewalks along zuni.
		Bicycle lanes would be great. I live off Zuni/JW Powell, and found that there isn't that much traffic - I'm not sure why we would need to add auto lanes or traffic lights. Rural nature of the area is a benefit to residents, as is access to trails.
		Poor sidewalk conditions. No sidewalk along Zuni. Unsafe crossing for bikes/peds. Concrete cracking under the (pedestrian) bridge.
<b>Wildlife Crossings</b>	10	Scientists that study animals, plants, environmental impacts, climate change, and more should be involved in this study to identify potential impacts of impending development.
		A large herd of elk (100+) Travels from behind Pine Canyon to a long bow and arrow Trail + behind CCC Juniper point. Some deer also.
<b>Congestion/Traffic</b>	5	A proper turn lane onto Zuni to not disrupt the flow of traffic toward JW Powell
<b>ADA Access</b>	6	It is nearly impossible for a person with mobility issues to cross this intersection (Zuni and Lone Tree)
		No ADA access along Zuni



No comments were received that corresponded with the Flood and Drainage Issues. However, four (4) pins were added to the map. All are located in and near the Zuni intersection and Bow and Arrow Wash. Eight (8) pins were added from the open house that correspond to Pavement Conditions. No comments were provided.

## Other Comments Received

Participants were invited to make closing comments of which 7 were received.

### *Pedestrian and Bicycle Related:*

- Thank you for the opportunity to provide my input. Flagstaff is an amazing town with so much more potential to make it more pedestrian/ cycling friendly which could be an economic driver by increasing tourism from cyclists around the world. Cyclists have a high average household income and disposable income, but also the reduced vehicular traffic spurs a greater sense of community and connection which I believe is what Flagstaff is all about.
- Please provide a nice bike lane on both sides of the road.

### *Safety Related:*

- The Zuni and lone tree crossing can feel unsafe, especially when traffic is high. Pedestrian crossing at this intersection is also neglected despite it having a trail crossing and access to CCC.

### *Environment Related:*

- Very concerned about preserving as many trees (especially mature Ponderosa) as possible, and very concerned about impacts to wildlife and their ability to cross safely. I've lived in the area for 24 years.

### *Appreciation:*

- Thanks for seeking my input!
- Thank you for allowing the residents in this area to voice their opinion.
- Thank you for having an open house to solicit input for the future planning process.

**APPENDIX M:**  
**Public Outreach Summary**



# Outreach Summary

South Lone Tree Planning & Environmental Linkages (PEL) Study

## Introduction

The purpose of this Planning and Environmental Linkages (PEL) study is to provide direction to the City of Flagstaff, MetroPlan, and member agencies about potential environmental impacts and mitigations to allow for timely development of the future roadway expansion along South Lone Tree Road.

This is a *pre-planning* environmental review study that will produce a final Planning and Environmental Linkages (PEL) Statement and Checklist.

The PEL does not provide roadway design(s), however, it will identify and establish the largest potential footprint which will inform the future design of this section of roadway. As a first step in the transportation planning process, the environmental constraints will be considered in the future planning and design phases, which will be led by the City of Flagstaff.

MetroPlan conducted outreach from September to November 2022, targeting two (2) specific groups:

Stakeholders	Stakeholders are individuals or representatives from organizations or interest groups that have a strong interest in MetroPlan's work and policies.
Public	The public includes individuals and business that resides in or visits the study area.

In addition to the public and stakeholders being engaged in the PEL process. MetroPlan’s partners, specifically the City of Flagstaff, were involved and provided guidance through the study. Partners are the agencies that will adopt and implement plans, policies, and programs. These [partners](#) sit on MetroPlan's Technical Advisory Committee, Management Committee, and Executive Board.

The Public Involvement Plan (PIP) for this study is available on MetroPlan’s website:

<https://www.metroplanflg.org/pel>

Table 1 provides a summary of activities that have been completed for both stakeholders and the public.

*Table 1: Outreach summary*

DATE	OUTREACH TYPE
February 6	Pre-Project consultation with Federal Highway Administration (FHWA)
Sep. – Dec.	<i>Project updates and coordination with the Technical Advisory Committee (TAC) and Executive Board</i>
August 25	Kick-off meeting with the City transportation department
August 31	Launch of PEL Project Website: <a href="http://www.metroplanflg.org/pel">www.metroplanflg.org/pel</a>
September 6	Notification letter and invite to adjacent property owners
September 26	Notification letters and invite to Tribal Governments
September 28	Notification letters and invite to community organizations, groups, and service providers
November 7 - 20	Online Survey – Flagstaff Community Forum
November 8-9	Direct mailers/invite sent to residents and businesses
November 17	Open House & Interactive Mapping Activity
January 25, 2023	Final presentation and findings – virtual meeting

## Stakeholder Outreach

MetroPlan is a product of important working relationships among a variety of local, county, regional, and state government representatives, as well as community organizations, and cannot be effective without them. As part of the PEL study, community stakeholders were identified to provide feedback, concerns, and interest in the PEL process. Table 2 demonstrates the variety of stakeholders that were invited to participate.

Table 2: Stakeholder List

			Community Organizations/Service Providers
<ul style="list-style-type: none"> <li>Arizona Board of Regents – NAU</li> <li>Flagstaff Lodge No. 7 Free &amp; Accepted Masons</li> <li>Towns on Lone Tree Owners, LLC</li> <li>PC Village Association Inc.</li> <li>TLC PC Golf LLC</li> </ul>	<ul style="list-style-type: none"> <li>Hualapai Tribe</li> <li>Pueblo of Zuni</li> <li>Navajo Nation</li> <li>Tonto Apache Tribe</li> <li>Yavapai Apache Nation</li> <li>Yavapai Prescott Indian Tribe</li> <li>White Mountain Apache Tribe</li> <li>San Carlos Apache Tribe</li> <li>Hopi Tribe</li> <li>Fort McDowell Yavapai Tribe</li> <li>Mescalero Apache Tribe</li> </ul>	<ul style="list-style-type: none"> <li>Federal Highway Administration (FHWA)</li> <li>Arizona Department of Transportation (ADOT)</li> <li>US Fish &amp; Wildlife Service</li> <li>Army Corp. of Engineers</li> <li>Arizona Game &amp; Fish</li> <li>City of Flagstaff</li> <li>Coconino County</li> <li>Mountain Line</li> </ul>	<ul style="list-style-type: none"> <li>Coconino Community College</li> <li>Kinsey Elementary School</li> <li>Grand Canyon Trust</li> <li>Center for Biological Diversity</li> <li>Friends of Walnut Canyon</li> <li>Transwestern Pipeline</li> <li>Century Link/Lumen</li> <li>APS</li> <li>Friends of Flagstaff Future</li> <li>Flagstaff Arboretum</li> <li>Conservation Study Forum</li> <li>Northern Arizona University (NAU)</li> </ul>

**Property owners** that were adjacent to the PEL study area were identified through the Coconino County Assessors office. A notification letter and map were mailed to each owner with project information and ways to communicate with the planning team. No concerns from adjacent property owners were submitted.

**Tribal governments** were identified through the Arizona State Historic Preservation Office (SHPO). Using SHPO’s “Government-to-Government Consultation Toolkit”, MetroPlan provided certified letters and/or emails to 29 individuals representing 11 tribal governments. The purpose of these letters was to seek any knowledge of cultural resources in the study area. Three (3) tribes responded with no adverse effects on tribal cultural heritage resources and/or historic properties.

**Local, State, and Federal Agencies** were consulted throughout the study. These agencies provide guidance and information for the study area. Guidance from these agencies can be found in the PEL Corridor Conditions Report.

**Community Organizations and Service Providers** were provided the opportunity to provide feedback in regard to local needs and concerns within the study area. One (1) concern was submitted that provided feedback on the future design as it relates to improving the comfort and safety of bicyclists and pedestrians.

## Public Outreach

The PEL study is the first step of the planning process therefore it is important to be strategic in engagement and outreach, especially as this project is not currently funded or scheduled for construction. The PEL provides guidance on future project planning and development that will be carried out by the City of Flagstaff.

MetroPlan provided the public with the opportunity to be engaged through all levels of the IAP2 Public Participation Spectrum (as identified in the [Public Involvement Plan](#)), except for “Empower”. Empower is based on the decision-making process – because this is a data-collection study no decisions are being made at this time. However, as future planning of the roadway is developed, these individuals, groups, and organizations will be invited to collaborate with the city and will then be empowered to decide on mitigation tactics and roadway design.

As a pre-planning process, MetroPlan relied on existing communications such as email lists and website, provide updates at MetroPlan monthly public meetings, and hosted an online survey, and open house that allowed the community and provide critical feedback on the study area.

**PEL Website** launched on August 31, 2022. The webpage received a total of 63 views over 90 days. No comments were received via the website.

**Direct Mailers** were sent to 1053 residents and businesses around the PEL study area. MetroPlan understood that it would be crucial to provide opportunities for the community to participate, especially residents and businesses that reside within the study area. It is for this reason, and the benefit of enhanced dialogue with the community, that MetroPlan hosted a 2-hour Open House at Coconino Community College (CCC) where community members



could annotate the study area map to further identify the needs and concerns of South Lone Tree Road. Paper versions of the survey were also provided. CCC was chosen for its proximity to the study area. It also allowed faculty, staff, and students to participate as they too use this corridor frequently. Due to multiple scheduling conflicts and the proximity to Thanksgiving, the 2-hour Open House was scheduled for Monday, November 14, 2022, and only saw three (3) participants. All participants had received the mailer.

**An Online Survey** was developed asking the larger community for their input on needs and concerns with the study area. The survey consisted of 5 study-related questions, including a mapping exercise, and 7 demographic questions. The survey was available online via the City’s Community Forum from November 7-20 (13 days). The survey received 25 responses.



# Appendices

## Appendix A: Property Owner Notification Letter



ADOT  
CITY OF FLAGSTAFF  
COCONINO COUNTY  
MOUNTAIN LINE  
NAU

### EXECUTIVE BOARD

- Chair  
Jim McCarthy  
Councilmember  
City of Flagstaff
- Vice-Chair  
Jeronimo Vasquez  
Supervisor District 2  
Coconino County
- Patrice Horstman  
Supervisor District 1  
Coconino County
- Austin Asian  
Councilmember  
City of Flagstaff
- Regina Salas  
Councilmember  
City of Flagstaff
- Jesse Thompson  
Arizona State  
Transportation Board
- Tony Williams  
Mountain Line Board of  
Directors

Dear X,

Please be advised that MetroPlan, in cooperation with the City of Flagstaff, is conducting a Planning and Environmental Linkages (PEL) Study along S. Lone Tree Rd. from Zuni Rd to J.W. Powell. This is the first step in the planning process to identify environmental impacts and solutions to allow for the timely development of future roadway expansion.

A PEL study is a **high-level**, early-planning study process that considers environmental, community, and economic goals early in the planning stage and carries them through project development, design, and construction. The PEL study will gather data to inform the environmental review process, including the National Environmental Policy Act (NEPA), and provide that for public feedback. The PEL will evaluate the potential maximum width of the roadway for vehicles, bikes, and pedestrians by identifying as many potential environmental impacts as possible to avoid or solve in the final design. Applying the PEL and previous plans, studies, and current policies, the City will design a roadway that functions for all road users.

The City of Flagstaff intends to seek federal funds for roadway improvements along this section of Lone Tree Road. A PEL provides evidence of project preparation which is a competitive advantage in this situation. *Please know that engineering, design, and construction for this project is not currently programmed and will be accelerated if federal funding is approved.*

There are several significant projects planned along and near Lone Tree Road. These include:

- Lone Tree Overpass
- Lone Tree Road Widening (Butler to Pine Knoll Dr.)
- J.W. Powell Road Extension

The southern section of Lone Tree Road is integral to the above projects, but also future development and growth along Lone Tree Road and J.W. Powell Blvd. We invite you to learn more about this project by visiting [www.metroplanflg.org/pe/](http://www.metroplanflg.org/pe/). Project updates and the environmental documents will be available as they are completed. This study will conclude in December 2022.

If you have further questions, or would like to receive project updates, please contact Mandia Gonzales, MetroPlan Transportation Planner at 938-266-1293 or [mandia.gonzales@metroplanflg.org](mailto:mandia.gonzales@metroplanflg.org)

Scan to be directed to the PEL website



## Appendix B: Tribal Notification Letter



ADOT  
CITY OF FLAGSTAFF  
COCONINO COUNTY  
MOUNTAIN LINE  
NAU

### EXECUTIVE BOARD

**Chair**  
Jim McCarthy  
Councilmember  
City of Flagstaff

**Vice-Chair**  
Jeronimo Vasquez  
Supervisor District 2  
Coconino County  
Patrice Horstman  
Supervisor District 1  
Coconino County

Austin Aslan  
Councilmember  
City of Flagstaff

Regina Salas  
Councilmember  
City of Flagstaff

Jesse Thompson  
Arizona State  
Transportation Board

Tony Williams  
Mountain Line Board of  
Directors

November 28, 2022

Dr. Damon R. Clarke, Chairman  
Hualapai Tribe  
P.O. Box 179  
Peach Springs, AZ 86434  
(928) 769-2216  
DClarke2@hualapai-nsn.gov

**Re: South Lone Tree Road Planning & Environmental Linkages (PEL) Study, City of Flagstaff, Arizona**

Dear Dr. Damon R. Clarke,

You are invited to provide [MetroPlan](#) knowledge of cultural resources in the area of this project, inform us about other concerns you may have, and let us know if you wish to be consulted by MetroPlan about this project. You are receiving this letter because you were identified as the contact for your tribe through Arizona SHPO's Government-to-Government Consultation Toolkit.

MetroPlan, in cooperation with the City of Flagstaff, is conducting a Planning and Environmental Linkages (PEL) Study along S. Lone Tree Rd. from Zuni Rd to J.W. Powell. This is the first step in the planning process to identify environmental impacts and solutions to allow for the timely development of future roadway expansion.

### Project Description

A PEL study is an early planning process that considers environmental, community, and economic goals early in the planning stage and carries them through project development, design, and construction. The PEL study will gather data and public feedback to inform the environmental review process, including the National Environmental Policy Act (NEPA).

This project will evaluate the potential maximum width of the roadway for vehicles, bikes, and pedestrians and identify as many potential environmental impacts as possible to avoid or solve in the final design.

### Project Purpose

The City of Flagstaff intends to seek federal funds through competitive grants for future roadway improvements along this section of Lone Tree Road. This project provides evidence of project preparation which is a competitive advantage in this situation. *Please know that engineering, design, and construction for this project are not currently scheduled and are dependent on future funding.*



**Project Location**

The project area lies within the City of Flagstaff, along South Lone Tree Road from Zuni Road to J.W. Powell Boulevard. The study area is approximately 900 feet in length and will evaluate up to 300 feet to either side of the centerline. ~~EnviroSystems Management Inc.~~ EnviroSystems Management Inc. is the environmental firm performing the study for MetroPlan. The enclosed [map](#) the project location.

**Questions & Feedback**

Please do not hesitate to contact Mandia Gonzales, project manager for this PEL study, at (928) 266-1293, at the letterhead address, or at [mandia.gonzales@metroplanfig.org](mailto:mandia.gonzales@metroplanfig.org). MetroPlan would appreciate a response within 30 days of receipt of this letter. Email or phone ~~is~~ the preferred contact methods.

Further information is provided on MetroPlan's website at [www.metroplanfig.org/pef](http://www.metroplanfig.org/pef). Project updates and environmental documents will be available as they are completed. This study is planned to conclude in December 2022.

Sincerely,

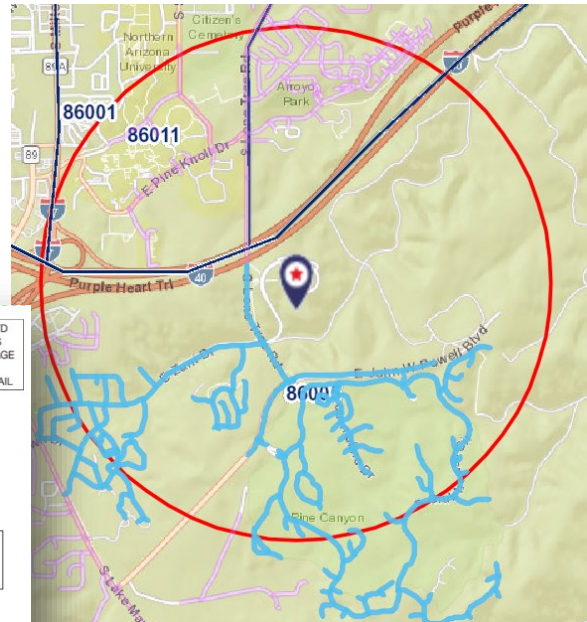
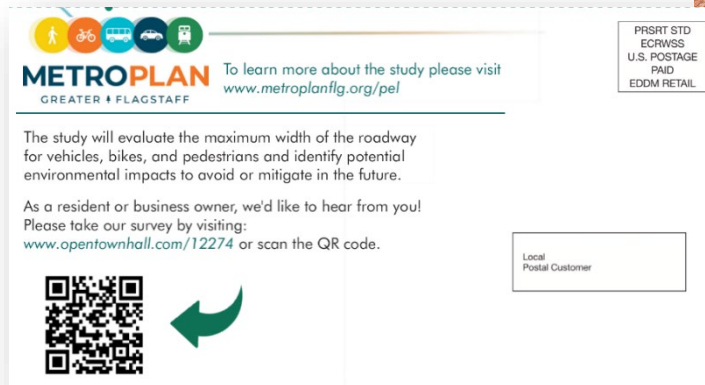
A handwritten signature in black ink, appearing to read "Mandia".

Mandia Gonzales  
Transportation Planner  
MetroPlan

Cc: Martina Dewley, THPO

## Appendix C: Residential and Business Open House Invite

1053 postcards were sent via USPS (Every Door Direct Mail) targeting the residents and businesses south of Interstate 40 along mail route C014.



# South Lone Tree Road Planning & Environmental Linkages Study

**WE NEED YOUR FEEDBACK! WHILE WE HAVE DEVELOPED SOME INITIAL IDEAS ABOUT WHAT NEEDS EXIST, WE WANT TO BETTER UNDERSTAND THE NEEDS WITHIN THIS CORRIDOR FROM YOU.**

Join us on Nov. 14th at Coconino Community College (Room 201) from 6:00 - 8:00 pm or take our online survey!

**APPENDIX N:**  
**MetroPlan Committee Rosters**

## 2023 MetroPlan Ex. Board & TAC Roster



Committee	First Name	Last Name	Department	Title	Email	Phone (work)
Ex. Board	Jim	McCarthy	City of Flagstaff	Councilmember	jmcCarthy@flagstaffaz.gov	(928) 213-2015
Ex. Board	Austin	Aslan	City of Flagstaff	Vice Mayor	austin.aslan@flagstaffaz.gov	(928) 213-2015
Ex. Board	Miranda	Sweet	City of Flagstaff	Councilmember	miranda.sweet@flagstaffaz.gov	(928) 213-2016
Ex. Board	Patrice	Horstman	Coconino County	Supervisor, District 1	phorstman@coconino.az.gov	(928) 679-7161
Ex. Board	Jeronimo	Vasquez	Coconino County	Supervisor, District 2	jvasquez@coconino.az.gov	(928) 679-7162
Ex. Board	Tony	Williams	Mountain Line	Mountain Line Board of Directors	tony.williams@coconino.edu	(928) 226-4334
TAC	Myrna	Bondoc	ADOT	Regional Planner	mbondoc@azdot.gov	602.712.7622
TAC	Michelle	McNulty	City of Flagstaff	Planning Director	michelle.mcnulty@flagstaffaz.gov	(928) 213-2607
TAC	Anne	Dunno	Mountain Line	Capital Program Manager	adunno@mountainline.az.gov	928.679.8942
TAC	Brenden	Foley	ADOT	N. Central Dist. Administrator	bfoley@azdot.gov	928.774.1491
TAC	Jess	McNeely	Coconino County	Community Development Assistant Director	wmcneely@coconino.az.gov	928-679-8869
TAC	Nate	Reisner	Coconino County	Assistant County Engineer	nreisner@coconino.az.gov	(928) 679-8617
TAC	Jeff	Bauman	City of Flagstaff	Acting City Engineer and Transportation Manager	jbauman@flagstaffaz.gov	(928) 213-2690
TAC	Ed	Stillings	FHWA	Senior Transportation Planner	ed.stillings@dot.gov	602-382-8966
Mgmt	Greg	Clifton	City of Flagstaff	City Manager	greg.clifton@flagstaffaz.gov	(928) 213-2053
Mgmt	Christopher	Tressler	Coconino County	County Engineer	ctressler@coconino.az.gov	(928) 679-8300
Mgmt	Heather	Dalmolin	Mountain Line	CEO and General Manager	hdalmolin@mountainline.az.gov	928-679-8908
Mgmt	Josh	Maher	NAU	Associate Vice President, Community Relations	joshua.maher@nau.edu	928-523-8831
Staff	David	Wessel	MetroPlan	Planning Manager	david.wessel@metroplanflg.org	(928) 266-1293
Staff	Jeff "Miles"	Mielbeck	MetroPlan	Executive Director	jeff.mielbeck@metroplanflg.org	(928) 266-1293
Staff	Sandra	Tavel	MetroPlan	Transportation Planner	sandra.tavel@metroplanflg.org	(928) 266-1293
Staff	Mandia	Gonzales	MetroPlan	Transportation Planner	mandia.gonzales@metroplanflg.org	(928) 266-1293