# State Parks BroadBand

## State of Arizona – Department of Administration

**Change Request (PIJ#AD23006)**

June 19, 2024

ARIZONA
DEPARTMENT OF ADMINISTRATION

### Agency Vision

Excellence in Arizona government with leading-edge enterprise support

### Agency Mission

To deliver effective and efficient enterprise support services to our agency customers, allowing them to focus more on their unique missions.

# Team Introduction

ARIZONA
DEPARTMENT OF ADMINISTRATION
TECHNOLOGY

## Roles Present at ITAC

- Suzan Tasvibi-Tanha - Business Sponsor
- Steven Jenkins - Technical Lead
- Guna Giri - Project Manager
- Linda Colwell - Product SME

# Project Introduction

ARIZONA DEPARTMENT OF ADMINISTRATION TECHNOLOGY

## Date/high-level overview of the approved original project investment justification (PIJ):

On May 17th 2023, ADOA ASET approved the project investment justification (PIJ) to procure the State Parks Broadband project solution

**Solution Benefits :**

- Carrier connections will provide a dedicated State Network for Park staff and a Public WiFi campus for day visitors and campers who can stay on site for up to 14 days at a time in up to 18 parks
- Enhances the visitor experience and promote safety
- Provides additional recreational opportunities, such as streaming music, movies, or educational content that can enhance the visitor experience
- Many areas on some the parks are unserved or underserved from cellular carriers
- State Parks will be migrating older legacy systems to the broadband carrier connection
- Internet Access to the up and coming State Parks App
- ADOA will focus on expanding broadband access to specific state parks based upon an Arizona State Parks approved prioritization

The PIJ submitted in May, 2023 had a total project budget of $ 20,600,000

# Project Change Request Overview

ARIZONA DEPARTMENT OF ADMINISTRATION TECHNOLOGY

## What in the PIJ is changing?:

- ✓ Scope: Reducing the number of State Parks to build out the Broadband and Public WiFi from 18 down to 6
  IV&V: As the approved funding is being reduced to under $5,000,000, we will be decommissioning the IV&V process and have a final IV&V report in first quarter FY 2025
- ✓ Timeline: May 2023 PIJ was for June 2024, Park Broadband and Wifi Buildout extended to June 2025 with operational support costs until June 2026
- ✓ Budget: Reducing the budget to $3,000,000 from the original budget of $20,600,000

## What initiated this change?:

- Unable to baseline a milestone plan for State parks Broadband project due to the following reasons
  - Team identified many nuances and pre-requisites resulting in the need to keep updating the cycle 1 timelines
  - State parks reduced the scope for WiFi over several iterations based on esthetics, execution and operational costs, which required additional vendor visits to the parks
  - Additional approvals through the State Historical Preservation Society, Arizona State Museum and Tribal Committees were identified resulting in the need to perform cultural resource surveys in order to fill out the required documentation
  - Budget reduction of the awarded ARPA funds, OSPB approving $3,000,000 and an ISA Extension until June 30,2026

*Multiple Risks and Issues were identified and have been added to the project since November 2023*

# IV&V Risk Assessment Report

ARIZONA DEPARTMENT OF ADMINISTRATION TECHNOLOGY

## Info-Tech Research Group Report June 13,2024

- Recommendations and Risks being actively reviewed and monitored according to the mitigation plan
- Key Info-Tech Recommendations
  - Assign accountability for project specific communication requirements
  - Increase the granularity of vendor-specific project tasks
  - Determine/socialize due dates for planning from vendor required to baseline park-specific planning
  - Consider leveraging some pre-existing ASPT processes to increase alignment between Agencies on project implementation methodology
- Key Info-Tech Risks
  - External permitting approval time
  - Milestone 3: the transition of legacy hardware/systems onto project Broadband/Wi-Fi
  - Post-implementation net benefits realization
  - Governance structure PM has no authority over ASPT ground resources
    - The Project manager is accountable for the success of the Project but will struggle to enforce RACI with ASPT resources
  - Timeline and funding contingency
    - Currently, the contingencies are built into the schedule. This implies it may be difficult to know, at a glance, if a particular workstream or work product is using contingency at a higher-than-expected rate.

# Revised Project Scope

ARIZONA DEPARTMENT OF ADMINISTRATION TECHNOLOGY

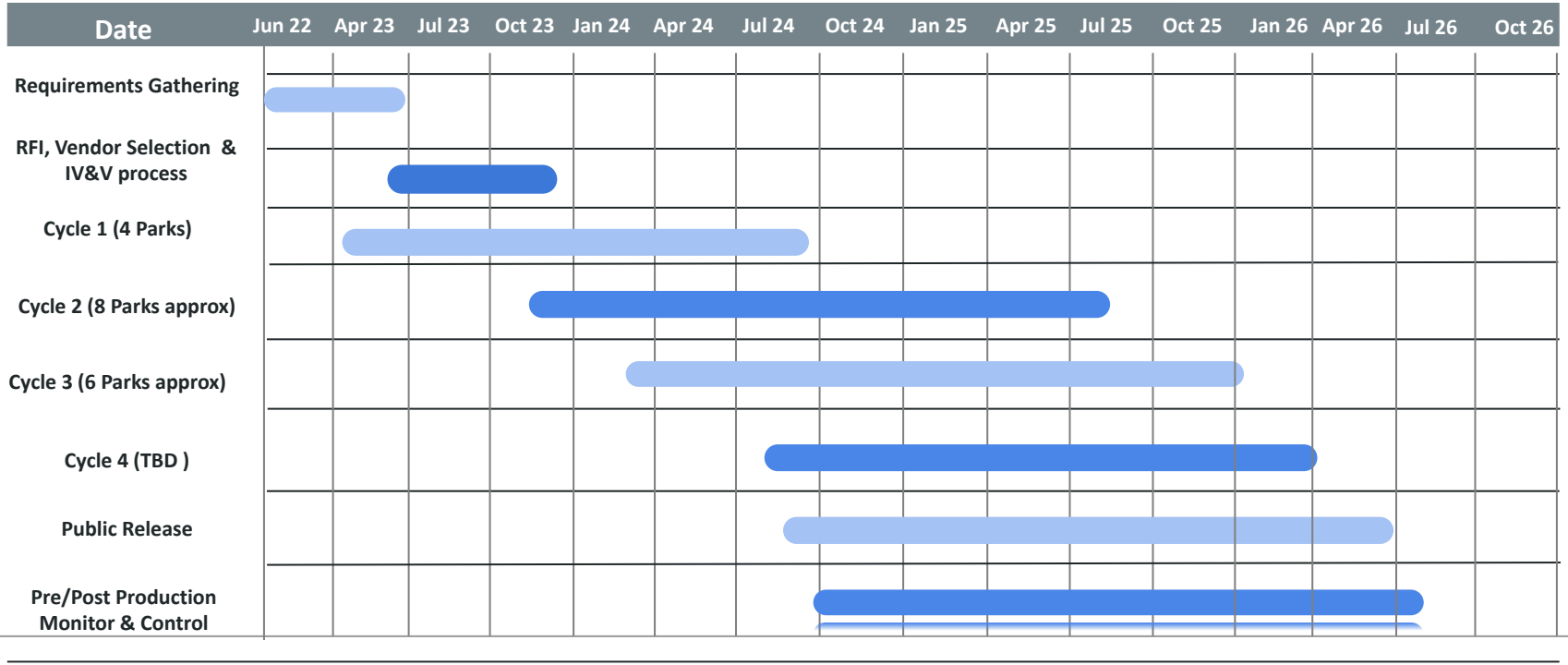
## Identify any change in scope and possible benefits:

- Project Scope has been reduced to 6 parks from 18 parks to include only the following:
  - Four - cycle 1 parks for Broadband and WiFi
    - Dead Horse Ranch (DEHO)
    - Patagonia Lake (PALA)
    - Lost Dutchman (LUDO)
    - Kartchner Caverns (KACA) only WiFi
  - Two - cycle 2 parks for Broadband and WiFi
    - Lake Havasu
    - Catalina

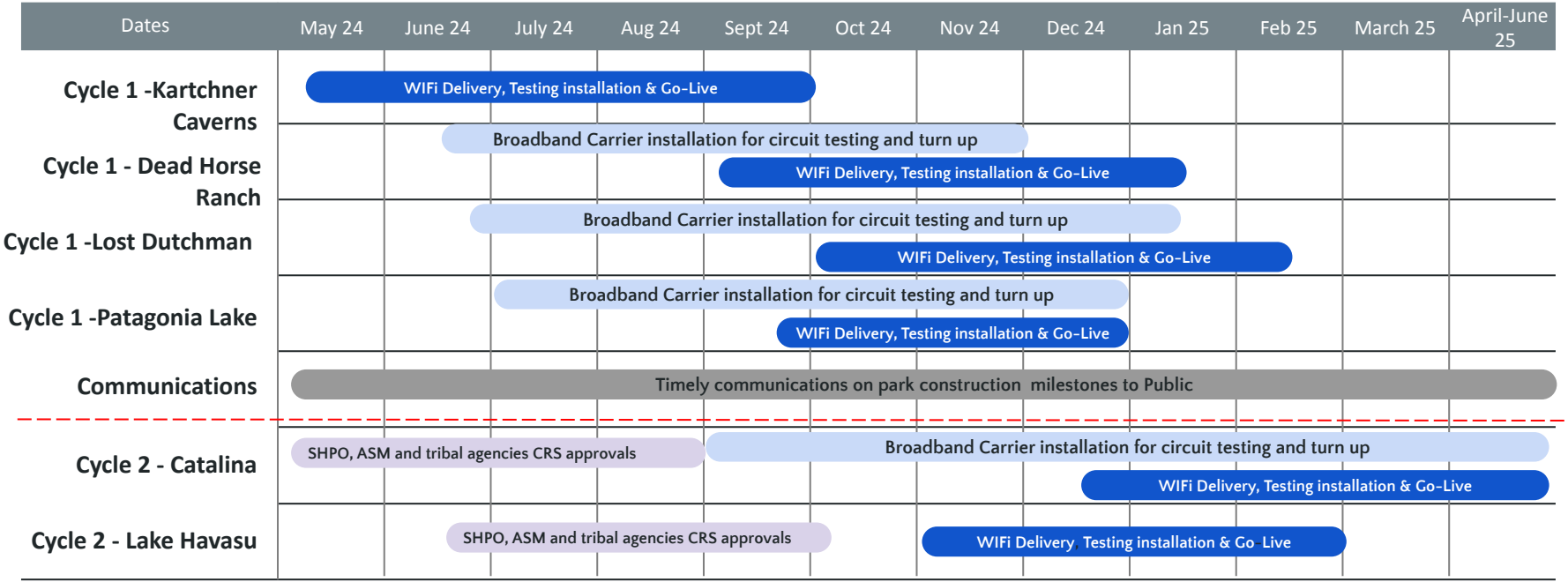
- Reductions to the park coverage areas were done in efforts to protect the land throughout the parks and safeguard the beautiful views and surrounding aesthetics
- Operational costs and future refresh of wireless equipment for “full park” coverage would not be sustainable

# Original Project Timeline:

## State Parks BroadBand and WiFi



# Proposed Project Timelines



# Original Project Costs

ARIZONA DEPARTMENT OF ADMINISTRATION TECHNOLOGY

| Project Costs by Category | FY24 | FY25 | FY26 | FY-- | Total |
|---|---|---|---|---|---|
| Admin, Professional & Outside Services | $125,000 | $225,000 | $225,000 | | $575,000 |
| IV&V services | $160,000 | $164,000 | $164,000 | | $488,000 |
| 1G/10G Equipment and Carrier Buildout | $903,000 | $3,851,000 | $2,931,688 | | $7,685,688 |
| MRC Up Front For Broadband Contract | $86,400 | $185,303 | $74,380 | | $346,083 |
| Cultural Resource Survey and ENG Drawings | $153,900 | $305,600 | $260,200 | | $719,700 |
| Customer Buildout costs | $60,000 | $155,000 | $148,000 | | $363,000 |
| WIFI Campus Costs | $2,048,529 | $4,596,000 | $3,172,000 | | $9,816,529 |
| WiFi Campus Monitor and Tier 1,2 and 3 Support | | $238,000 | $368,000 | | $606,000 |
| Other Operational Expenditures | | | | | |
| **Total Development** | **$3,536,829** | **$9,719,903,903** | **$7,343,268** | | **$20,600,000** |
| **Total Operational** | | | | | |

Project Costs were based on Estimates

# Proposed Project Costs

ARIZONA DEPARTMENT OF ADMINISTRATION TECHNOLOGY

| Project Costs by Category | FY24 | FY25 | FY26 | Total |
|---|---|---|---|---|
| Admin, Professional & Outside Services | $110,000 | $180,000 | | **$290,000** |
| IV&V services | $125,000 | $48,000 | | **$173,000** |
| 700MB/10G Equipment and Carrier Buildout | $0 | $1,052,762 | | **$1,052,762** |
| MRC Up Front For Broadband Contract | | | | |
| Cultural Resource Survey and ENG Drawings | $170,000 | $0 | | **$170,000** |
| Customer Buildout costs | $0 | $168,675 | | **$168,675** |
| WIFI Campus Costs | $0 | $981,401 | | **$981,401** |
| Broadband & WiFi Campus Monitor and Tier 1,2 and 3 Support ( Operational Costs) | $0 | $50,750 | $113,712 | **$164,462** |
| **Total Development** | **$405,000** | **$2,430,838** | | **$2,835,838** |
| **Total Operational Costs** | | **$50,350** | **$113,812** | **$164,462** |
| **Total Costs** | **$405,000** | **$2,481,188** | **$113,812** | **$3,000,000** |

# Parks Operational Costs FY25 & FY 26

ARIZONA DEPARTMENT OF ADMINISTRATION TECHNOLOGY

| FY25 | | | | |
|---|---|---|---|---|
| **Cycle 1 Parks** | **Broadband Circuit Costs** | **Wifi Equipment Support Tier 1 & 2** | **Wifi Equipment Support Tier 3** | **Total** |
| Kartchner Caverns (12 Months) | $ - | $ 4,400 | $ 3,500 | $ 7,900 |
| Dead Horse (6 Months) | $ 6,600 | $ 1,550 | | $ 8,150 |
| Lost Dutchman (6 Months) | $ 6,600 | $ 1,800 | $ 3,500 | $ 11,900 |
| Patagonia Lake (6 Months) | $ 6,600 | $ 2,700 | $ 3,500 | $ 12,800 |
| Catalina (2 Months) | $ 2,200 | $ 1,000 | | $ 3,200 |
| Lake Havasu (4 Months) | $ 4,800 | $ 2,000 | | $ 6,800 |
| **Grand Total** | | | | **$ 50,750** |

| FY26 | | | | |
|---|---|---|---|---|
| **Cycle 1 Parks** | **Broadband Circuit Costs** | **Wifi Equipment Support Tier 1 & 2** | **Wifi Equipment Support Tier 3** | **Total** |
| Kartchner Caverns | $ - | $ 4,400 | $ 3,500 | $ 7,900 |
| Dead Horse | $ 13,200 | $ 2,520 | $ 3,500 | $ 19,220 |
| Lost Dutchman | $ 13,200 | $ 3,384 | $ 3,500 | $ 20,084 |
| Patagonia Lake | $ 13,200 | $ 5,208 | $ 3,500 | $ 21,908 |
| Catalina | $ 13,200 | $ 5,000 | $ 3,500 | $ 21,700 |
| Lake Havasu | $ 14,400 | $ 5,000 | $ 3,500 | $ 22,900 |
| **Grand Total** | | | | **$ 113,712** |

* Highlighted cells in yellow are estimates

# Q & A Session

# Recommended Conditions

## ADOA-ASET Conditions

1. Should development costs exceed the approved estimates by 10% or more, or should there be significant changes to the proposed technology scope of work or implementation schedule, the Agency must amend the PIJ to reflect the changes and submit it to ADOA-ASET, and ITAC if required, for review and approval prior to further expenditure of funds.
2. Monthly reporting on the project status is due to ADOA-ASET no later than the 15th of the month following the start of the project. Failure to comply with timely project status reporting will affect the overall project health.
3. The Agency may proceed with the proposed solution, however, the agency must provide a risk assessment done by Lumen to the Department of Homeland Security after go live.

# ITAC Voting Options

ARIZONA DEPARTMENT OF ADMINISTRATION TECHNOLOGY

## What ITAC May Consider In Review Whether:

a. The proposed solution addresses the stated problem or situation;

b. The budget unit is competent to carry out the project successfully;

c. Sufficient sponsorship and support by budget unit leadership exists;

d. Cost estimates provided are accurate;

e. The proposed project aligns with the budget unit's Strategic IT Plan; and

f. The proposed solution complies with statewide IT standards.

## ITAC Motions:

a. Move to Approve

b. Move to Approve with Conditions As Presented

c. Move to Approve with Conditions

   i. Committee May Modify or

   ii. Add Conditions

d. Move To Deny

Relevant Statutes and Rules

Per A.R.S. § 18-101 - Per Administrative Code R2-18-101

# Appendix

# Revised State Park WiFi Design

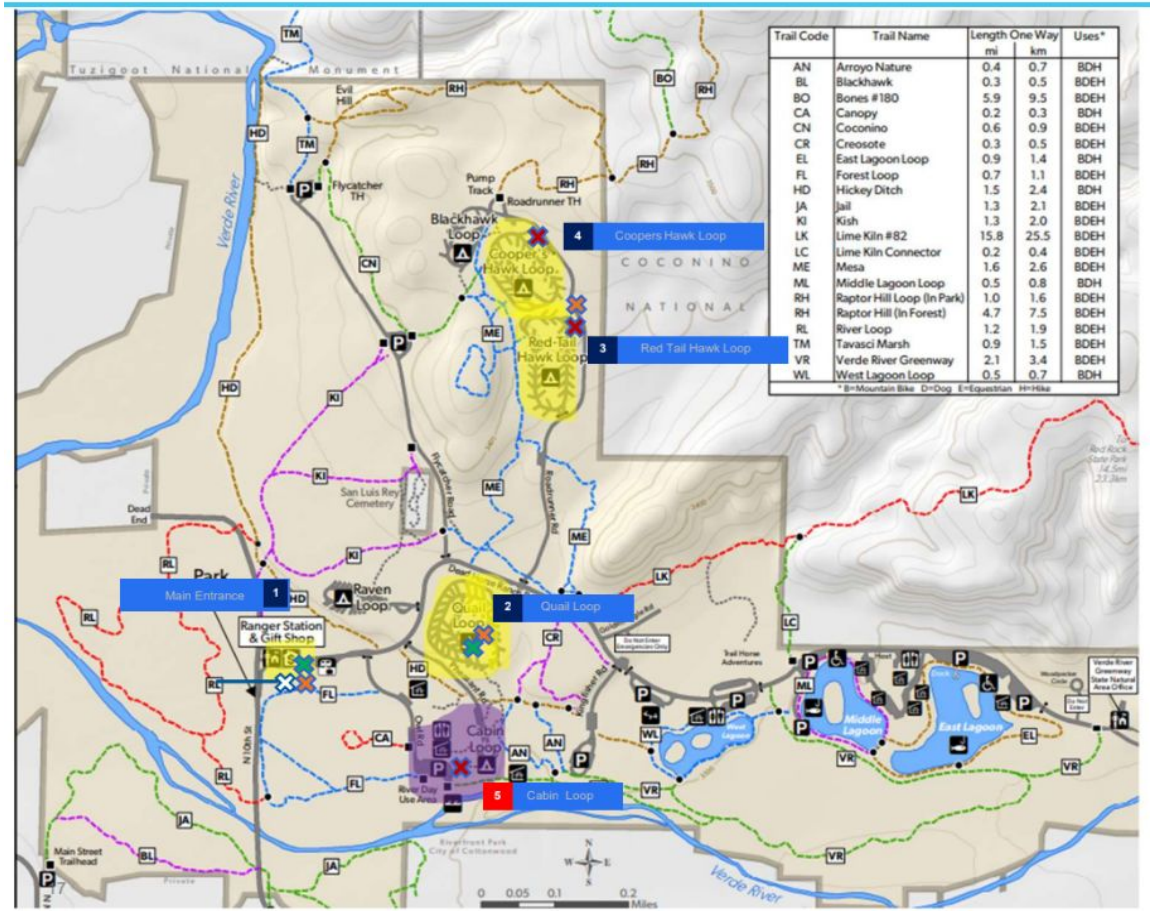
## Revised Design Goals

- Limit and/or remove towers everywhere possible.
  - Goal is to not put up any new towers, need to use the existing buildings and or structures
- Do everything possible to not disturb any ground.
  - Ease the Cultural Resource Survey required.
- Do everything possible to hide and make equipment least visible as possible.
- Revise the Base Solution to focus on Specific Areas
- Identify specific areas that are High Priority additions due to Safety and Security or Plans for Education and Training.

Final Wi-Fi Coverage Area

# KARTCHNER CAVERNS®
STATE PARK

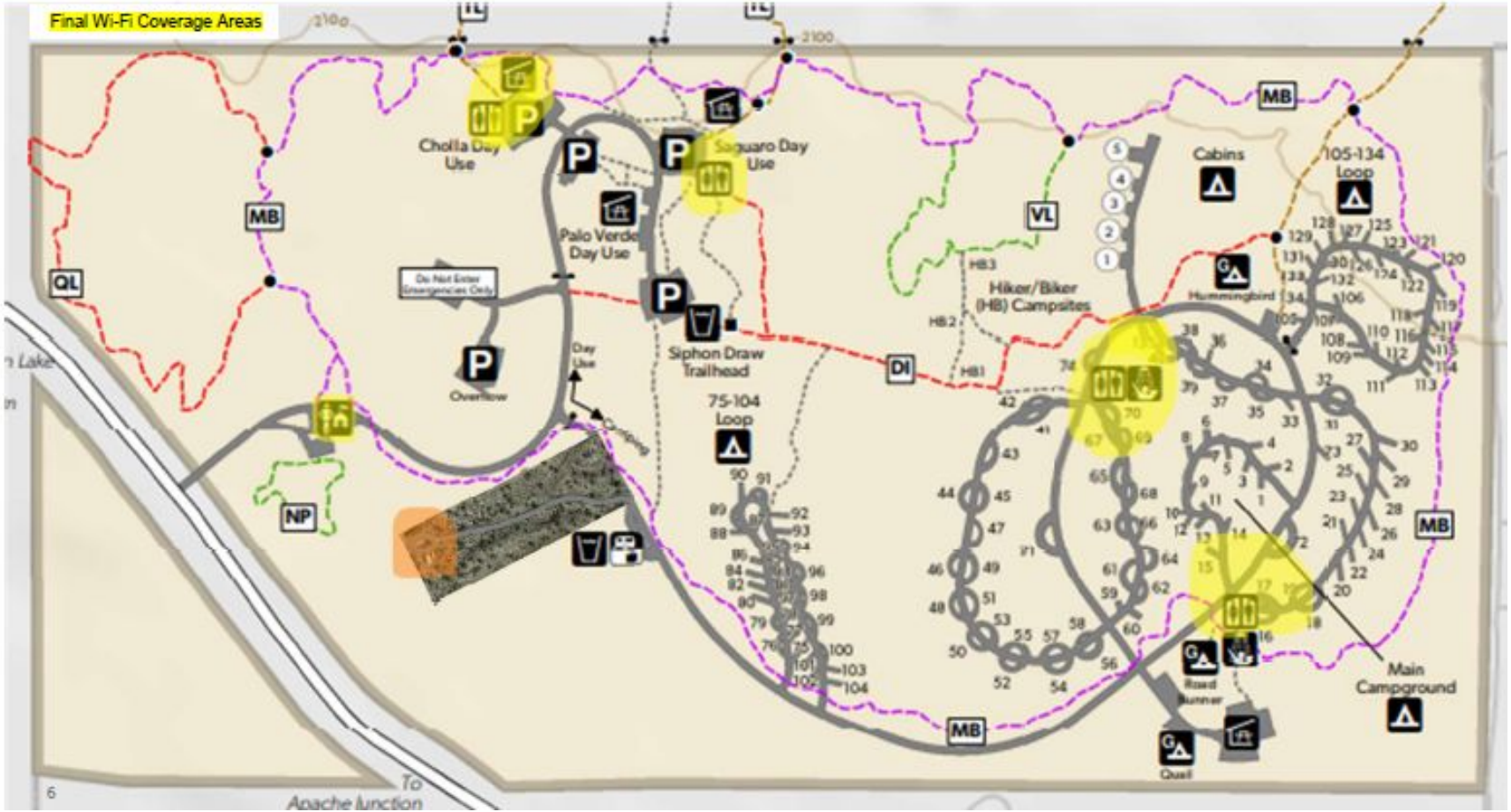
# DEAD HORSE RANCH
STATE PARK

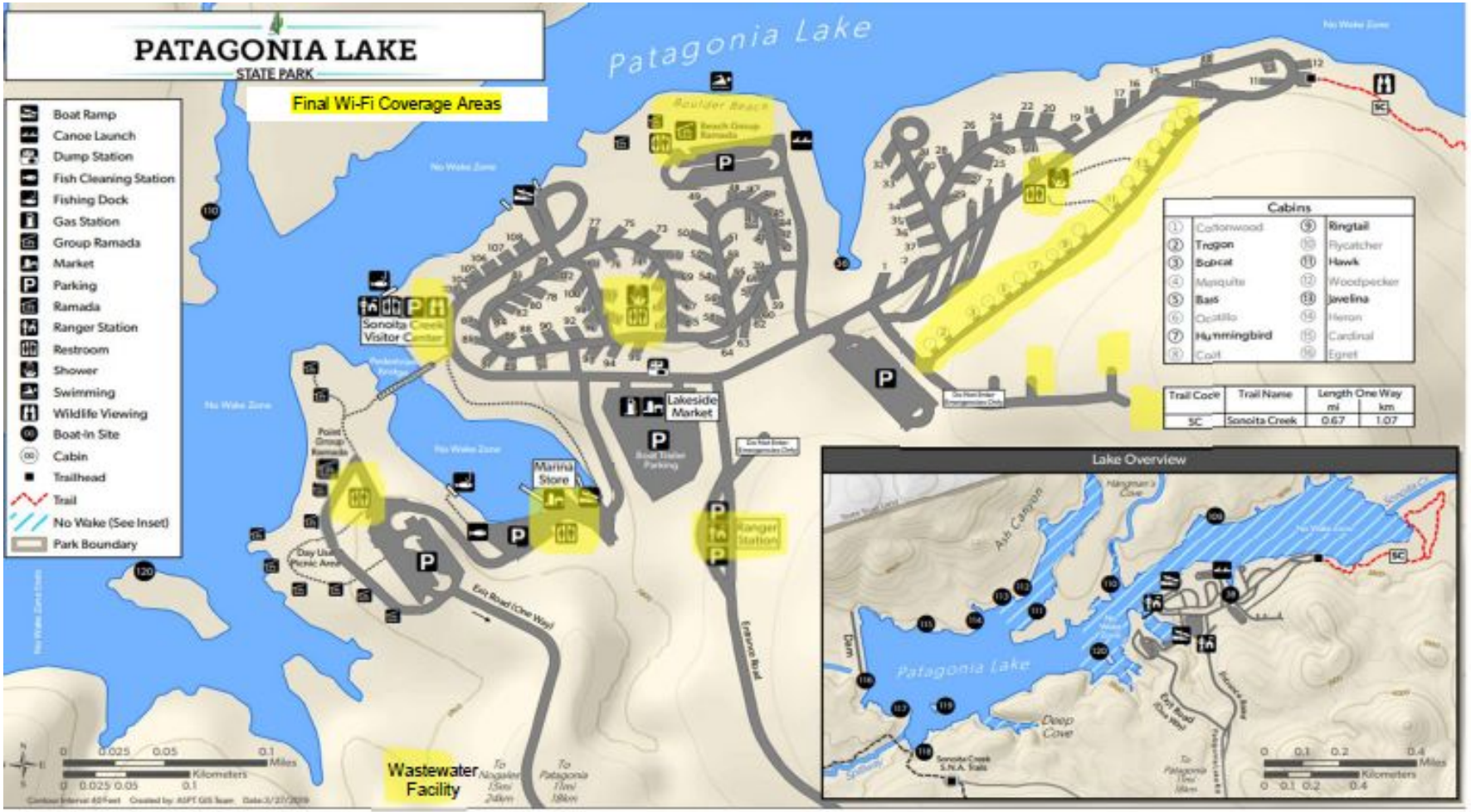



| Trail Code | Trail Name | Length One Way mi | km | Uses* |
|---|---|---|---|---|
| AN | Arroyo Nature | 0.4 | 0.7 | BDH |
| BL | Blackhawk | 0.3 | 0.5 | BDEH |
| BO | Bones #180 | 5.9 | 9.5 | BDEH |
| CA | Canopy | 0.2 | 0.3 | BDH |
| CN | Coconino | 0.6 | 0.9 | BDEH |
| CR | Creosote | 0.3 | 0.5 | BDEH |
| EL | East Lagoon Loop | 0.9 | 1.4 | BDH |
| FL | Forest Loop | 0.7 | 1.1 | BDEH |
| HD | Hickey Ditch | 1.5 | 2.4 | BDH |
| JA | Jail | 1.3 | 2.1 | BDEH |
| KI | Kish | 1.3 | 2.0 | BDEH |
| LK | Lime Kiln #82 | 15.8 | 25.5 | BDEH |
| LC | Lime Kiln Connector | 0.2 | 0.4 | BDEH |
| ME | Mesa | 1.6 | 2.6 | BDEH |
| ML | Middle Lagoon Loop | 0.5 | 0.8 | BDH |
| RH | Raptor Hill Loop (In Park) | 1.0 | 1.6 | BDEH |
| RH | Raptor Hill (In Forest) | 4.7 | 7.5 | BDEH |
| RL | River Loop | 1.2 | 1.9 | BDEH |
| TM | Tavasci Marsh | 0.9 | 1.5 | BDEH |
| VR | Verde River Greenway | 2.1 | 3.4 | BDEH |
| WL | West Lagoon Loop | 0.5 | 0.7 | BDH |

* B=Mountain Bike D=Dog E=Equestrian H=Hike

LOST DUTCHMAN
STATE PARK




PATAGONIA LAKE
STATE PARK
Final Wi-Fi Coverage Areas
Patagonia Lake
Boat Ramp
Canoe Launch
Dump Station
Fish Cleaning Station
Fishing Dock
Gas Station
Group Ramada
Market
Parking
Ramada
Ranger Station
Restroom
Shower
Swimming
Wildlife Viewing
Boat-In Site
Cabin
Trailhead
Trail
No Wake (See Inset)
Park Boundary
Sonoita Creek Visitor Center
Lakeside Market
Marina Store
Ranger Station
Boat Trailer Parking
Day Use Picnic Area
Point Group Ramada
Boulder Beach
Beach Group Ramada
Entry Road (One Way)
Entrance Road
No Wake Zone
Wastewater Facility
To Nogales 15mi 24km
To Patagonia 11mi 18km
Cabins
1 Cottonwood
2 Trogon
3 Bobcat
4 Mesquite
5 Bass
6 Ocotillo
7 Hummingbird
8 Coot
9 Ringtail
10 Flycatcher
11 Hawk
12 Woodpecker
13 Javelina
14 Heron
15 Cardinal
16 Egret
Trail Code | Trail Name | Length One Way mi | km
SC | Sonoita Creek | 0.67 | 1.07
Lake Overview
Ash Canyon
Hangman's Cove
Dam
Patagonia Lake
Deep Cove
Sonoita Creek N.A. Trails
Miles
Kilometers

# 2 Parks Pending Site Visits

Arrangements are being made with vendors for final site visits and WiFi Plans

**Catalina State Park - 11570 N Oracle Rd, Tucson, AZ 85737**

Catalina State Park is located at the base of the Santa Catalina Mountains. It is home to nearly 5,000 saguaros and desert plants. There are 5,500 acres of foothills and canyons that offer opportunities for camping, hiking, and bird watching. The park is home to more than 150 species.

**Lake Havasu - 699 London Bridge Rd, Lake Havasu City, AZ 86403**

Lake Havasu State Park is a state park located on Lake Havasu in Mohave County, Arizona, US. The park provides outdoor recreation opportunities such as camping, boating, and fishing. The Arroyo-Camino Interpretive Garden displays local desert flora. Windsor Beach includes picnic tables and grills