

Introduction to the Navajo Natural Heritage Program and the “budding” Navajo Native Plants Program

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Navajo Natural Heritage Program

Navajo Department of Fish and Wildlife

Navajo Fish & Wildlife Department

Management and



Research Section

Management & Research Section: Issue Hunting & Fishing Permits



Wildlife Conservation Officers: Enforce fish & wildlife laws & regulations



Animal Control: Impoundment of stray dogs & cats



NNHP

Navajo Natural Heritage Program

Natural Heritage Program: Endangered Species Program



Navajo Nation Zoo: In Window rock, AZ. Free admission. Mon-Sat. 10a-4:30p

Natural Heritage Programs

- Nature Conservancy, 1970's
- “The ecological diversity of a given area can be measured and thus be improved”
- Location & condition of at-risk species & ecosystems
- Network of State Gov't, University affiliations, non-profit orgs
- Data compiled in NatureServe database
- Inform research and land management decisions
- Environmental law compliance

Natural Heritage Botanist Duties

- Field Work!
 - Monitor known populations
 - *Formal*
 - *Population visits*
 - Track population size, condition, landscape context
 - Inventory for new populations
- Data Management (BIOTICS)
- Species Status Reports

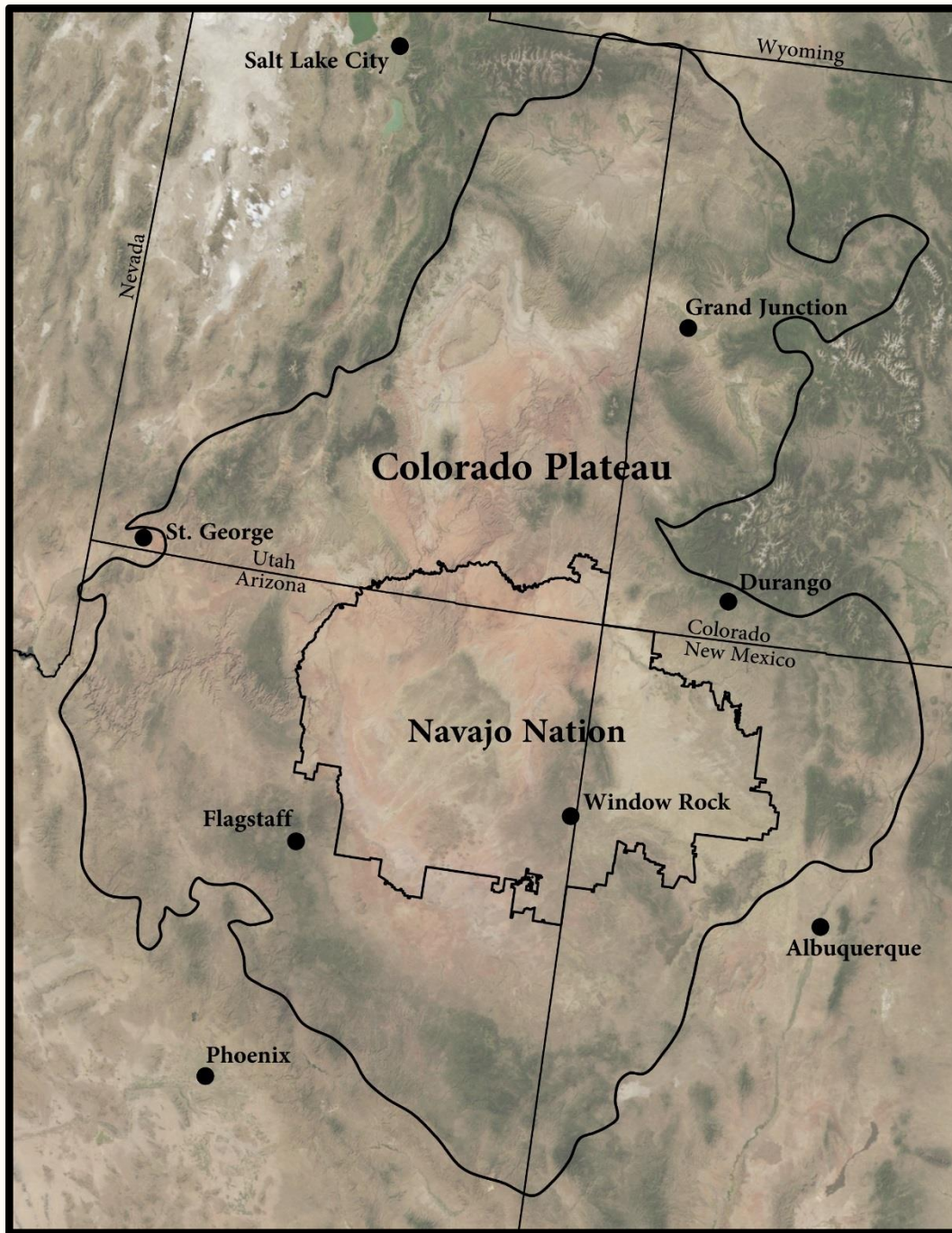


Brady pincushion cactus monitoring plot at Marble Canyon

Herbarium Curation

- 12,500 specimens
- Housed at Deaver Herbarium (NAU)
- Primarily Navajo Nation specimens
- Emphasis on rare plants





The Navajo Nation

- 27,000 square miles
- 1/3 of the Colorado Plateau
- 4 states: AZ, NM, CO, UT

Diverse habitat on Navajo



Chuska Mountains



**Canyon De Chelly
Hanging gardens**



Near Tuba City



Salt Trail, Little Colorado

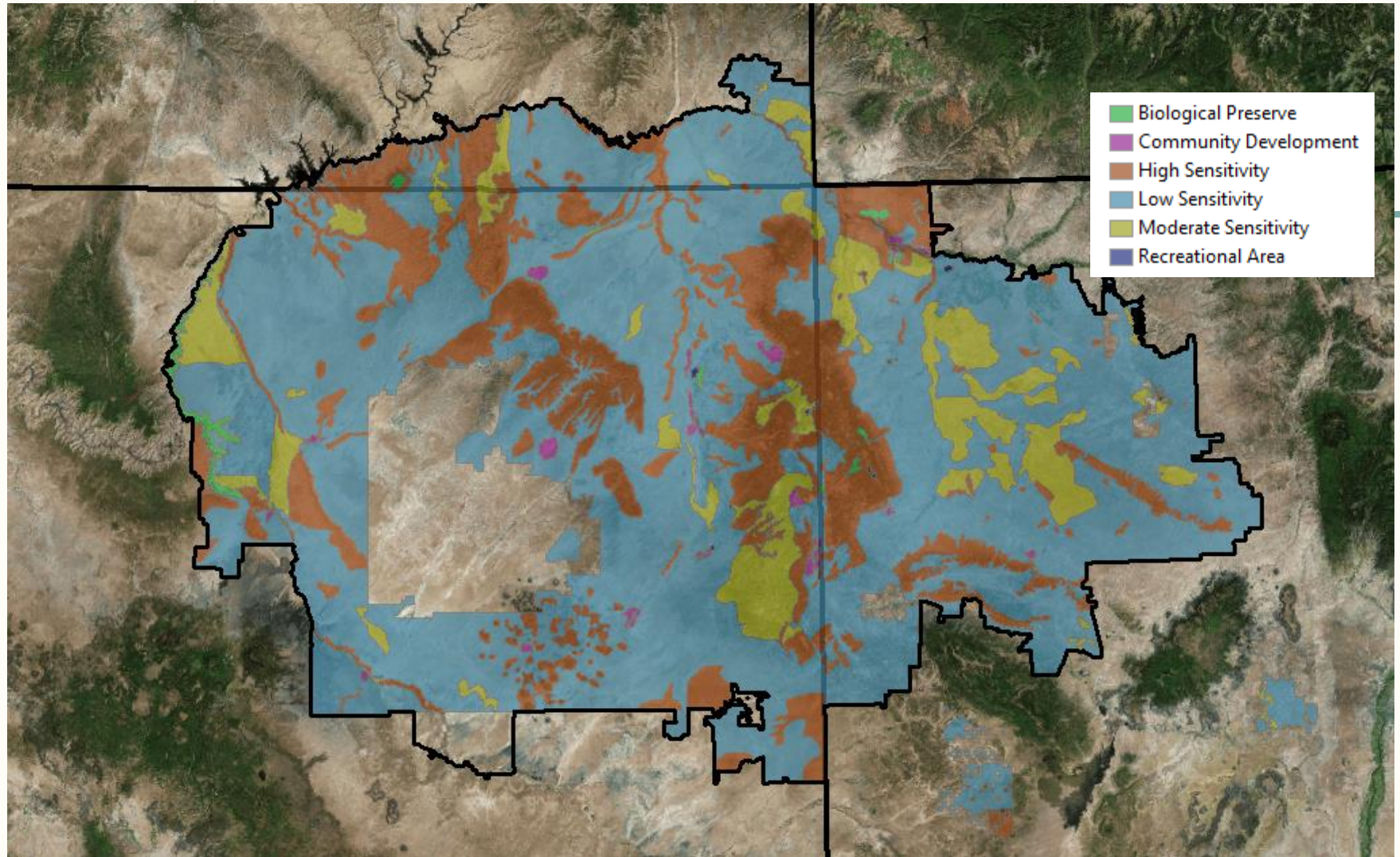


View from Navajo Mountain



Navajo Mountain

Lots of rare plants and wildlife species



FORMER BENNETT FREEZE AREA

Legend

- Bennett Freeze Area
- Navajo Nation Chapter
- State Highway
- US Highway

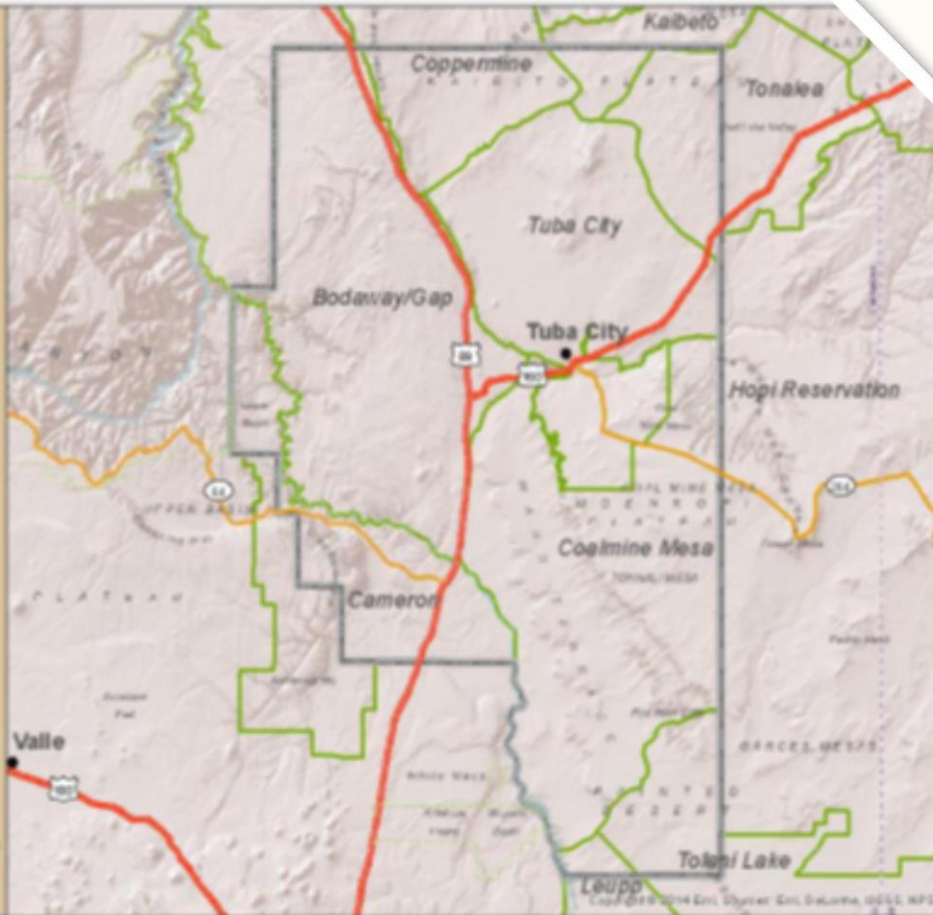
Project Area



Project Vicinity Map
Cochise County, AZ
Navajo Nation Chapters:
Bodaway Gap, Cameron,
Coalmine Mesa, Coppermine,
Kaibeto, Leupp, Tonalea,
Tolani Lake, Tuba City

0 5 10 Miles

Projection: NAD83 UTM Zone 12N
Created 4/22/2015 by NPS



FBFA IRMP 2016

Former Bennett Freeze Area

- 1.5 million acres
- 1966 Administrative Order
- Prevented new development
- Prohibited maintenance of existing structures on disputed land

Former Bennett Freeze Area (FBFA)

- 2009 Freeze lifted
- 2015 NN begins to address FBFA
- 2016 Legislation and funding is approved to begin building
- Community Land Use Plans
- NHP - Technical assistance





Navajo Native Plants Program

- Initial planning stages
- Partnership with the Navajo Forestry Department: 4 greenhouses, seed processing, seed storage facilities
- Conifer reforestation program active during logging years 1964-1994: currently used to grow small number of plants
- Native plants garden featuring culturally-important species





Navajo Native Plants Program

Short-term goals:

- Develop priority species list for seed collection and grow-out based on community and agency needs
- Cultivate partnerships, other tribes and regional native plant programs
- Secure funding
- Assess infrastructure and materials needs
- Provide employee training in native plants cultivation, seed collecting, banking, and nursery management



Navajo Native Plants Program

Long-term goals:

- Collect and store seed for restoration species on Navajo
- Collect and store seed from strategic rare species on the Navajo endangered species list
- Propagate genetically-appropriate native materials for use in upland, rare plant, and riparian restoration
- Propagate culturally-important and desirable landscaping plants and make them available to Navajo community members
- Educate Navajo about the importance of rare, restoration, and culturally-significant native plants
- Provide employment to Navajo youth and community members



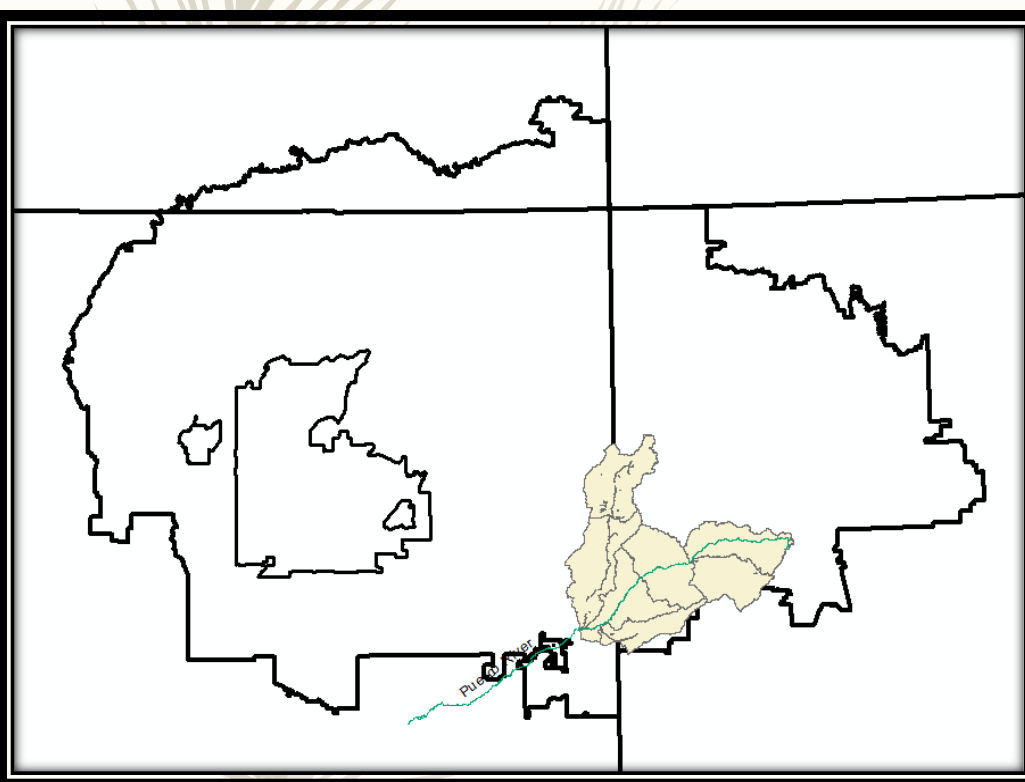
Pending Grant



BIA Youth Initiative Grant: Navajo Native Plants Internship

- 40-week internship, 2 interns
- Native plant needs and feasibility assessment
 - Tribal agencies
 - Community members
- 15-week horticultural internship at the Flagstaff Arboretum
- Seed collecting, rare plant monitoring with the Navajo Natural Heritage Program

Black Creek Watershed Restoration



- NRCS funded Regional Conservation Partnership Program
- Black Creek Watershed Restoration: 4 million over 5 years
- Many partners; NDNR, LCRWCA, NFW, NDA, BIA, NDWR
- **Navajo Fish and Wildlife**
 - Riparian revegetation and Invasive Removal
 - *Seed collection, interns & seasonal*
 - *Propagation of riparian plants using forestry greenhouses*

Questions?

Work With US!

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