

BUILDING RESILIENCY WITH NATIVE SEEDS: NAVAJO NATION MANAGEMENT RECOMMENDATIONS

The *Building Resiliency with Native Seeds* project integrates western science with traditional knowledge to address environmental issues on tribal lands by training tribal staff, elected officials, community members, and youth to identify, collect, grow, and deploy locally-adapted native seeds in agricultural and restoration settings.

WHY LOCALLY-ADAPTED?

Locally-adapted plants are better suited to local rainfall, soils, and summer/winter temperatures. The use of locally-sourced plant materials improves the success of restoration projects.



Top 5 environmental issues that need improvement according to Navajo communities (Results from 2018 survey conducted by Diné Native Plant Program)

Rangeland Improvement	62%
Erosion control	56%
Invasive plant removal	41%
Wildlife habitat improvement	41%
Wetland improvement	37%

LOSS OF PLANT COVER CAN CAUSE

SOIL EROSION



Projected to increase with future drought conditions

DEGRADATION OF WILDLIFE HABITATS



Decrease in forage for wildlife and livestock

REDUCTION OF AQUIFER RECHARGE



Soil water retention is predicted to decline as drought increases

DEGRADED AIR AND WATER QUALITY



Atmospheric dust has been linked to numerous respiratory disorders

Diné Native Plants Program

The Diné Native Plants Program (DNPP) was created in response to a scarcity of locally-sourced, native plant providers on the Navajo Nation.

The goal of the DNPP is to serve as a living library of locally-sourced native plants for restoration, conservation, and research, and to provide Diné people access to plants for the benefit of the community, culture, wildlife, and land.

The DNPP is a new program with the Navajo Natural Heritage Program, under Navajo Department of Fish and Wildlife



RECOMMENDATIONS FOR LAND MANAGERS ON THE NAVAJO NATION

SEED INCREASE FIELD PRODUCTION



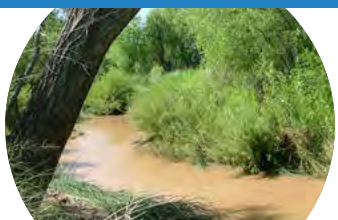
Encourage Navajo Farmers to help us grow native plants for seed production as a low-water alternative to traditional crops

HOUSING AND URBAN DEVELOPMENT



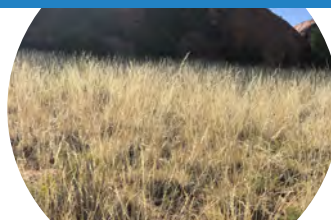
Prioritize native species for low-water landscaping and vegetate after soil disturbance

RIPARIAN RESTORATION



Increase water retention by revegetating eroding streambanks

RANGELAND IMPROVEMENT



Choose appropriate native species for rangelands to improve livestock forage and wildlife habitat

TREATMENT AFTER INVASIVE SPECIES REMOVAL



Combating invasive species with native plants protects biodiversity
Biodiversity mitigates climate change effects

MINE RECLAMATION



Reclaim sites with appropriate native plant species from the area

RESTORE AND CONSERVE DINÉ CULTURE



Collect and store seed from culturally important plants and host workshops on traditional uses of native plants

COMMUNITY OUTREACH



Teach the public and youth how to identify plants and ways to use them

Native Plant Policy for the Navajo Nation

In order to address environmental issues occurring across the landscape, DNPP is advocating for a “native plants” policy that encourages the use of locally-sourced native plants.

This policy will push the priority towards using locally-adapted native plants for restoration, reclamation, and landscaping efforts occurring on the Navajo Nation. This policy will also encourage revegetating with native species after removing invasive plants to restore wildlife habitat and reduce erosion.

The Diné Native Plant Program (DNPP) would like to meet the demands for native plant material. The DNPP is currently working on projects across the Navajo Nation such as riparian and rangeland restoration, community outreach, seed collecting, seed banking, and greenhouse production.

The Diné Native Plants Program can provide:



Native seeds collected from important grasses, wildflowers, and shrub species



Container plants for use in restoration and revegetation projects



Workshops and resources about best practices

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Revised 10/6/2020