EXECUTIVE SUMMARY Healthy Soil Program



About NMDA's Healthy Soil Program

As defined in 2019's Healthy Soil Act, the purpose of the Healthy Soil Program is "to promote and support farming and ranching systems and other forms of land management that increase soil organic matter, aggregate stability, microbiology and water retention to improve the health, yield and profitability of the soils of the state." To meet this purpose, NMDA's Healthy Soil Program funds projects that further the implementation and understanding of **five soil health principles**:

- 1. Keeping soil covered
- 2. Minimizing soil disturbance on cropland and minimizing external inputs
- 3. Maximizing biodiversity
- 4. Maintaining a living root
- 5. Integrating animals into land management, including grazing animals, birds, beneficial insects or keystone species, such as earthworms

Building capacity among Eligible Entities

The Healthy Soil Act directs NMDA to award funds to "eligible entities", including:

- 1. Soil and water conservation districts (SWCDs)
- 2. Acequias and land grants
- 3. Indian nations, tribes, and pueblos
- 4. New Mexico State University's Cooperative Extension Service

NMDA required individual farmers and ranchers to partner with an **Eligible Entity** in order to participate in the Healthy Soil Program, thereby forging a relationship between and building the capacities of both parties. Each of the four categories of **Eligible Entity** is included in NMDA's Healthy Soil Program outreach efforts, as well as represented in the Technical Review Committee NMDA convenes to evaluate and recommend projects for funding.

Grants to improve soil health

In both years of the Healthy Soil Program, NMDA convened a Technical Review Committee to recommend on-the-ground projects for grant funding. In FY19-20, the program's pilot year, NMDA awarded approximately \$178,000 to 19 projects. Among them:

- The Coronado Soil and Water Conservation District worked with the Pueblo of Sandia, which conducted soil testing to identify management needs of its community garden, established new pollinator habitat, and produced a brochure on soil health to distribute among pueblo members.
- The Acequia de la Otra Banda in Jaconcita worked with a farmer whose project reduced bare ground through a cover crop mix, increased biodiversity through compost treatments, and recontoured the land for more effective irrigation.
- The Colfax Soil and Water Conservation District (SWCD) worked with a rancher whose project improved plant diversity, ground cover, and water infiltration on 410 acres of degraded rangeland through bale grazing and no-till range plant seeding.

In FY20-21, NMDA selected 26 projects for a total of \$237,000. In partnership with their Eligible Entities, individual farmers/ranchers are starting work on their projects now, beginning with soil sampling and testing to establish a baseline health assessment.

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Soil health education and outreach efforts

Natural Resource Conservation Service (NRCS) New Mexico pledged a recurring annual match of at least \$100,000 to help NMDA promote soil health stewardship in the state. Utilizing these funds and Healthy Soil Program funding, NMDA funded two complementary sets of soil health education and outreach efforts during the program's pilot year:

- NMDA contracted with NMSU's Cooperative Extension Service to offer train-the-trainer
 workshops to individuals who represent Eligible Entities, specifically to build their
 technical capacity for engaging with farmers and ranchers in building soil health. In
 addition to their own soil scientists, NMSU tapped trusted experts from NRCS and
 private industry to help design and deliver instruction. Slides from and recordings of the
 NMSU-led workshops are available here (click on Soil Health Workshop).
- Eligible Entities and nonprofits submitted education/outreach proposals for funding consideration. Most projects focused on reaching agricultural producers, while others focused on reaching school students and the public.

In FY19-20, the program's pilot year, NMDA awarded approximately \$186,000 to 18 education/outreach projects occurring across the state. Among them:

- Working with the Santa Fe-Pojoaque SWCD, <u>Good Earth produced a multimedia</u>
 <u>package</u> featuring a farmer, rancher, fiber producer, orchardist, Native American land
 manager, backyard permaculturalist, and soil scientist utilizing the five soil health
 principles.
- The Quivira Coalition utilized Healthy Soil Program funds to edit a soil health workbook based on curriculum developed by NMSU's Cooperative Extension Service. The workbook helps individual land managers, as well as technical service providers, assess their current soil health and develop plans to improve it based on the five soil health principles.
- Forest Stewards Guild partnered with EcoTone to host three educational soil health
 events to raise awareness and generate interest in soil health. These events showed
 participants the practices that increase and protect natural soil cover in piñon-juniper
 woodlands.

Because these and other education/outreach efforts launched in 2020, the coronavirus and resulting public-health restrictions required grantees to shift the delivery of their education and outreach activities to teleconferencing technologies – <u>leading several grantees</u>, <u>including the Santa Fe Watershed Association</u>, to record their presentations for future use. This approach also made their education materials accessible to even far-flung audiences.

Looking Ahead

Going into the Healthy Soil Program's third year (FY 21-22), NMDA will continue to refine the program and application process, as well as outreach materials and related efforts – all based on feedback from various stakeholders, including participants and Eligible Entities.

NMDA's Healthy Soil Program Overview of Awarded Project Grants in FY20 & FY21

Projects by County					
County	FY20 Pilot Projects	FY21 Projects	Eligible Entities		
Bernalillo	3	3	Ciudad SWCD		
Cibola	1		Lava SWCD		
Colfax	2	2	Colfax SWCD		
Doña Ana	1	2	Doña Ana SWCD		
Eddy	1		Carlsbad SWCD		
Guadalupe		1	Guadalupe SWCD		
Quay	1	3	Canadian River SWCD, Southwest Quay SWCD		
Rio Arriba	2	5	Upper Chama SWCD, East Rio Arriba SWCD		
San Juan		1	San Juan SWCD		
San Miguel	1		Tierra y Montes SWCD		
Sandoval	1	2	Coronado SWCD		
Santa Fe	1	1	Santa Fe-Pojoaque SWCD, Acequia de la Otra Banda		
Sierra		1	Sierra SWCD		
Socorro	1		Socorro SWCD		
Taos	1	2	Taos SWCD, Vigil y Romo Acequia		
Torrance	1		Edgewood SWCD		
Valencia	1	3	Valencia SWCD, NMSU-Cooperative Extension Service		
Totals: 17 Counties	18 Pilot Projects	26 Projects	19 SWCDs, 2 Acequias, NMSU		

Projects by Land Type				
Land Type	2020	2021		
Farm (Including Orchard)	13	18		
Farm & Ranch	3	6		
Ranch	0	2		
Community Garden	2	1		

Most Popular Healthy Soil Practices			
Planting Diverse Cover Crop			
Reducing or Eliminating Tillage			
Introducing Compost/Mulch			
Integrating Animals			
Increasing Biodiversity			
Range Planting			

