Agriculture, Food, and Natural Resources Career Cluster

The Agriculture, Food, and Natural Resources (AFNR) career cluster focuses on the essential elements of life, food, water, land, and air. This career cluster includes occupations ranging from farmer, rancher, and veterinarian to geologist, land conservationist, and florist.

Statewide Program of Study: Environmental and Natural Resources

The Environmental and Natural Resources program of study focuses on occupational and educational opportunities associated with the research, design, and engineering of plans for prevention and control of environmental hazards. This program of study includes conducting research for the purpose of identifying, abating, or eliminating sources of pollutants or hazards that affect either the environment or the health of the population.

Secondary Courses for High School Credit

Level 1	• Principles of Agriculture, Food, and Natural Resources **(13000200)**
Level 2	• Wildlife, Fisheries, and Ecology Management **(13001500)**
Level 3	• Energy and Natural Resource Technology **(13001100)**
Level 4	• Advanced Energy and Natural Resource Technology **(13001200)**
Level 5	• Scientific Research and Design **(13037200)**

Work-Based Learning and Expanded Learning Opportunities

Work-Based Learning Activities	• Shadow a Ranch Manager/Game Warden • Participate in a water treatment plant operator apprenticeship at a local water management company
Expanded Learning Opportunities	• Participate in an FFA career, leadership, and speaking contest like an agriscience fair

Aligned Industry-Based Certifications

- **Ducks Unlimited Ecology Conservation and Management Certification – This is obtained in Wildlife, Fisheries, and Ecology)**

Example Postsecondary Opportunities

Apprenticeships
- Water Treatment Plant Operator

Associate Degrees
- Environmental/Environmental Engineering Technology
- Water Quality and Wastewater Treatment Management and Recycling Technology

Bachelor's Degrees
- Environmental Engineering
- Environmental Health

Master's, Doctoral, and Professional Degrees
- Biology/Biological Sciences
- Ecology

Additional Stackable IBCs/License
- Pesticide Dealer License

Example Aligned Occupations

Environmental Engineering Technologists and Technicians

Median Wage: $53,997
Annual Openings: 79
10-Year Growth: 18%

Environmental Scientists and Specialists

Median Wage: $79,386
Annual Openings: 407
10-Year Growth: 25%

Environmental Engineers

Median Wage: $114,899
Annual Openings: 228
10-Year Growth: 18%

Environmental and Natural Resources