	NMHU Unit Strategic Planning: FY21 Plan	
	Unit name:	**Natural Resources Management Department**
	VP / Dean / Chair / Director / Lead:	**Jennifer Lindline, Chair**
	Date prepared:	**Prepared 08/06/21; Submitted 09/17/21**

	PLAN - Unit Goals / Objectives									
Unit	**Unit / Department Objective**	**Purpose of Objective**	**SP Goal 1**	**SP Goal 2**	**SP Goal 3**	**SP Goal 4**	**SP Goal 5**	**Status (New or Ongoing)**	**Timeframe**	**Measureable outcomes**
NRM	1.1 Provide high quality instruction, maintain a current curriculum, and cover a range of topical proficiencies in natural resources management.	Support NMHU SG1: *Teach and mentor students to integrate a broad range of academic skills, a breadth and depth of curricular knowledge, and an interdisciplinary understanding.*	**X**					Ongoing	Fall 2023	1.1 (a) Hire a tenure-track Assistant/Associate Professor of Environmental Geology-GIS by fall 2023. (b) Hire a tenure-track Assistant/Associate Professor of Environmental Geology-Water Resources Science by fall 2023. (c) Employ one half-time paleomagnetic-rock magnetic analyst/instructor hired by fall 2022.
	1.2 All NRM Department students will have the opportunity to use cutting-edge analytical instruments in the study of natural resources management.	Support NMHU SG1: Teach and mentor students to integrate a broad range of academic skills, a breadth and depth of curricular knowledge, and an interdisciplinary understanding.	**X**					Ongoing	Annually	1.2 Outcomes Assessment Reports; 95% of NRM students report the ability to collect and critically analyze scientific data, apply relevant standards, reduce data, and interpret results.
NRM	1.3 Offer a Water Resources Certificate (undergraduate and graduate).	Support NMHU SG1: *Teach and mentor students to integrate a broad range of academic skills, a breadth and depth of curricular knowledge, and an interdisciplinary understanding.*	**X**					New	Fall 2022	1.3 Launch Water Resources Science undergraduate and graduate certificate programs by fall 2022.
NRM	1.4 Offer a new and improved GIS Program (GIS Minor, Undergraduate GIS Certificate, Graduate GIS Certificate).	Support NMHU SG1: *Teach and mentor students to integrate a broad range of academic skills, a breadth and depth of curricular knowledge, and an interdisciplinary understanding.*	**X**					New	Fall 2022	1.4 (a) Implement a signed MOU with Western New Mexico University for shared GIS programming. (b) Launch updated GIS minor and certificate programs AY 2022-23.

NRM	2.1 Graduate students with globalization skills – understanding of the interconnectedness of people and institutions of the world and stewardship of the Earth through inclusive and sustainable development.	Support NMHU SG 2. *Inspire students to action through environments that foster scholarship and produce graduates equipped to address regional and global issues.*		**X**				Ongoing	Annually	2.1 Outcomes assessment reports; in the context of their coursework, 95% of NRM students will demonstrate awareness of global issues and understanding of diverse cultures, perceptions, and approaches to world-wide problems.
NRM	2.2 Provide field experiences, internship opportunities, and multi-institutional research for NRM-Geology students.	Support NMHU SG 2: *Inspire students to action through environments that foster scholarship and produce graduates equipped to address regional and global issues.*		**X**				Ongoing	Annually	2.2 (a) ≥ 95% NRM-Geology students will participate in field excursions. (b) and (c) ≥ 50% NRM-Geology students will be placed in NRM-related internships and research assistantships with NRM faculty and/or external partners
NRM	3.1 The NRM Department will expand and enhance collaborative community partnerships with Federal and local agencies to create seamless outreach, address local water concerns, and expand opportunities for students.	Support NMHU SG 3: *Engage with and serve our communities for mutually beneficial exchanges of knowledge, services, and resources.*			**X**			Ongoing	Annually	3.1 (a) Inventory of outreach events, sign-sheets; ≥200 students receive information materials about NRM programs, internships, and careers. (b) Establishment of Watershed Monitoring Program at NMHU; regular collection, analysis, and tabulation of water quality data. (c) Partnership Internship Agreements, weekly intern time/effort forms, internship satisfaction surveys, supervisor satisfaction surveys.
NRM	4.1 Develop culturally responsive teaching.	Support NMHU SG 4: *Advance excellence in diversity, equity, and inclusion policies and practices.*				**X**		New	Annually	4.1 NRM Department achieves a welcoming and inclusive university environment.
NRM	4.2 Increase online offerings to reach an intellectually, socially, culturally, and geographically diverse student cohort.	Support NMHU SG 4: *Advance excellence in diversity, equity, and inclusion policies and practices.*				**X**		Ongoing	Annually	4.2 At least 4 NRM-Geology online courses are offered each academic year.
NRM	5.1 Grow total number Environmental Geology B.S. students to NRM undergraduate majors to 30 (~15% annual growth) by fall 2025.	Support NMHU SG5: *Be a comprehensive educational provider for all students including traditional, non-traditional, online, distance, community, and lifelong learners.*					**X**	Ongoing	Annually	5.1 Achieve 30 Environmental Geology undergraduate majors by fall 2025 from fall 2020 baseline of 15.

DO - Implement Plan		STUDY - Assessment			ACT - Improve
Action(s)	**Budget implication**	**Status (Met, Ongoing, Stop)**	**Outcome(s)**	**Challenge(s)**	**Improvement(s)**
1.1 Recruit, retain, and employ a team of faculty that reflects cultural, ethnic, and gender diversity, keeps the curriculum current and in concert with the program's educational goals and objectives, and provides effective academic advisement.	yes	Ongoing	In progress.	Difficult to offer all GEOL courses on a regular basis to ensure timely progress of all Environmental Geology B.S. majors, Geology minors, and GIS minors, and GIS certificate program students with small (2 tenured, 1 visiting professor) faculty cohort.	-----
1.2 NRM faculty will integrate mineral, rock, soil, and/or water analysis in their laboratory sections so that students can learn, practice, and master natural resources management analytics (for example, powder x-ray diffractometry, ion chromatography, AGICO MFK-1A Kappabridge analysis, and total organic carbon analysis).	yes	Ongoing	In progress.	-----	Environmental Geology majors do extremely well using and applying various tool and techniques (i.e. total station data; well log data; gravity and magnetic survey data; remote sensing data; calculus, linear algebra, redox reactions, and buffering equations) to complete homework and laboratory exercises. The Environmental Geology Program will continue to use multivariate datasets and instruments from geology and from outside disciplines throughout the curriculum.
1.3 Develop a Water Resources Certificate proposal for submission and review by the NMHU Academic Affairs Committee by November 2021. Advertise program and accept students by AY 2022.	yes	Ongoing	In progress.	-----	
1.4 (a)Develop an MOU with Western New Mexico University for collaborative GIS programming. Share instructional resources and cross enroll students to increase collaboration, cooperation, and interaction between the programs (GIS Minor, Undergraduate GIS Certificate, Graduate GIS Certificate). (b) Update the NMHU GIS program to include an Introduction to Geospatial Analysis and GIS Fundamentals course (without Surveying). Develop a proposal for submission and review by the NMHU Academic Affairs Committee by January 2022. Make recommended revisions. Update catalog and web information. Advertise program.	no	Ongoing	In progress.	-----	NRM Department faculty met regularly with WNMU GIS Program faculty to discuss program courses and collaboration opportunities. NRM Chair drafted MOU in Summer 2021 which was signed and implemented in Fall 2021. Cross enrollment of students in GEOL 4/5180 Remote Sensing launched Fall 2021.

2.1 (a) Provide opportunities for students to work in international settings. (b) Keep course content abreast with major currents of global changes and issues. (c) Schedule guest speakers (in person and on line) from around the world to speak on projects, experiences, and opportunities.	no	Ongoing	In progress.	-----	Global competency is a unique and noteworthy outcome of NRM-Environmental Geology Program students.
2.2 (a) Provide field experiences throughout the NRM-Geology curricula. (b) Provide internship opportunities from NRM faculty grants or external networks. (c) Arrange for students to work in external laboratories and field settings.	yes	Ongoing	In progress.	Student hiring process in People Admin is cumbersome. Navigating Chrome River is difficult. Reimbursing students for field travel challenging. Planning, arranging for student placement is time-consuming.	Experiential learning in the field and laboratories and with other students and professionals is a highlight of the NRM Department. The NRM faculty regularly coordinates shared learning experiences with professors from other universities and student placement with external research laboratories.
3.1 (a) Collaborate with partners (HPWA, UPWA, RMNWR) in K-12 outreach activities (Gallinas River Cleanup, Rio Mora STEM Day, Upper Pecos River Cleanup); promote NRM programs, support services, and student internships. (b) Engage students in water quality monitoring of local streams and watersheds. (c) Provide 2 internships per year in water resources science with local agencies.	no	Ongoing	In progress.		Community partnership is a hallmark of the NRM Department. The NRM faculty is heavily involved with natural resources management agencies and organizations, such as the Las Vegas and Rio Mora National Wildlife Refuges, Hermit's Peak Watershed Alliance, New Mexico Environment Department, and the US Forest Service. Shared research projects, aligned goals, and formal partnerships provide opportunities for students to learn, intern, and in many cases achieve permanent employment with these groups.
4.1 NRM faculty attends at least one seminar or workshop on diversity, inclusion, and equity (DIE) in higher education. Each member proposes one way to propel DIE as a responsibility and commitment within NRM programs of study. Chair dedicates time at NRM Department meetings on how to improve department professional practice.	no	Ongoing	In progress.	Small department; senior faculty on sabbatical in AY2021-22. Limited time for intentional DIE engagement.	Continue to seek additional faculty development opportunities.
4.2 (a) Faculty will participate in Center for Teaching Excellence instructional technology training to develop on-line course modalities. (b) Faculty will write proposal(s) to develop on-line mode of delivery for new and/or existing NRM-Geology courses for submission to and consideration by the NMHU Administration (CBA 12.12).	no	Ongoing	In progress.	Limited time for professional development and proposal writing.	-----
5.1 (a) Develop new marketing materials and website contents; disseminate to regional high schools and community colleges. (b) Participate in regional recruitment events (Luna CC, UNM-Taos, CNM, SFCC).	yes	Ongoing	In progress.	COVID-19 campus closures and travel restrictions limited outreach activities.	Visiting Professor of Environmental Geology position given 25% release specifically to participate in outreach/extension events and grow NRM-Geology enrollment. Anticipate increased student outreach and community engagement in AY2021-22 and resultant new and transfer student enrollment.