

# NRES STRATEGIC PLANNING PROCESS AND STATUS



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Academic Year 2013/14 strategic planning direction (i.e., mission, vision, goals, objectives, SWOT analysis, metric information, key initiatives) for the reorganized Natural Resources Management and Environmental Sciences Department (NRES) are presented in this report.

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# NRES Strategic Planning

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## INTRODUCTION AND BACKGROUND INFORMATION

On March 7, 2011 a new department was created at Cal Poly. The Earth and Soil Sciences Department merged with the Natural Resources Management Department to form the Natural Resources Management and Environmental Sciences Department (NRES). A Reorganization Cooperative Agreement was developed and signed by all faculty and staff that documented key agreements regarding the name of the new department, designation of department head, voting rights, retention of all personnel, retention of all facilities, maintenance/enhancement of programs that are accredited (i.e., FNR program), maintenance/enhancement of certification programs (e.g., soil erosion specialist), curriculum, and much more. Furthermore, it was specified in that document that visioning and strategic planning for the new department formation would commence immediately with participation from the full faculty and staff from both former departments. At that time the NRES Faculty and Staff also agreed that significant discussion would need to occur on how to attract more students to the Soil Science program.

The NRES Department began a strategic planning process in September 2011 with the final report completed May 2013 (Tietje 2013). Dr. Brian Tietje served as the facilitator of that strategic planning effort. This current report further refines the strategic direction contained in the Tietje (2013) report. Further, Dr. Andrew Thulin, CAFES Interim Dean, requested that department heads develop focused strategic direction reports that include information for their assigned departments on each of the following:

1. Strategic Planning Approach
2. Strengths, Weaknesses, Opportunities, and Threats (SWOT)
3. Metrics
  - a. NRES Department 2012/13 Budget Summary
  - b. Enrollment by Major
  - c. NRES Degrees Awarded
  - d. Number of Undergraduate Applications
  - e. Graduation Rates
  - f. NRES Faculty Assignment Data (FAD) Summary
  - g. 2012/13 Department Budget Summary
4. Goals and Objectives
5. Summary and Conclusion as to Key Findings and Needs

## NRES DEPARTMENT STRATEGIC PLANNING APPROACH

A three part NRES Strategic Planning effort was initiated in September, 2011 at the NRES Department Fall Conference with Dr. Tietje as facilitator. A final strategic planning document (Tietje 2013) was prepared at the conclusion of that three part strategic planning effort. Significant consultation occurred from September 2011 to May 2013 with key administrators (i.e., CAFES Dean, Provost and others), NRES Advisory Council, NRES Faculty and Staff, and many others. The three parts of the NRES Strategic Planning effort follow:

- **Part One:** Situation Analysis (i.e., Strengths, Weaknesses, Opportunities, Threats [SWOT])
  - Step One--Begin with an internal analysis of the NRES Department's strengths and weaknesses.
    - ◆ Strengths: what the NRES Department does exceptionally well, and any resources the program has that are of exceptional value
    - ◆ Weaknesses: what the NRES Department does not do well, or any resources the Department lacks (i.e., a candid assessment)
  - Step Two--Identify the NRES Department's external opportunities and threats.
    - ◆ Opportunities are trends or factors that are outside the department itself and that are favorable to the department's success
    - ◆ Threats are trends or factors that are outside the department itself and that are unfavorable to the department's success
  - Step Three--For each of these elements:
    - ◆ Acquire or collect data that supports your conclusions whenever possible.
    - ◆ Identify the points within each area (strengths, weaknesses, opportunities, threats) on which the faculty can collectively agree. Put items that are a source of disagreement or conflict to the side.
- **Part Two:** Discuss and develop a vision and mission statement for the department
  - Vision statement describes where the NRES Department wants to go. A vision statement that is written well can help motivate, inspire, and excite everyone in the organization. It's future-oriented.
  - Mission statement describes why the department exists and its present purpose. It's present-oriented.
- **Part Three:** Identify Key Strategic Areas of Emphasis and Action Plans. Once NRES faculty and staff have a well-supported list of strengths, weaknesses, opportunities, and threats with faculty consensus then:
  - Rate each item for its impact on the quality of the program:
    - ◆ 1 = little or no effect
    - ◆ 2 = some effect
    - ◆ 3 = significant effect.
  - Sort each list of strengths, weaknesses, opportunities, and threats by their potential impact, from highest to lowest.
  - Match the highest ranking strengths with the highest ranking opportunities (i.e., a specific program strength enables pursuit of a specific opportunity).
  - Match the highest ranking weaknesses with the highest ranking threats.
  - Using the results from steps 3 and 4, develop a list of NRES strategic priorities. These are actionable recommendations for the NRES department to implement. Rank these recommendations from highest to lowest, based on their potential impact and feasibility.
  - Now you have a strategic plan! From here, you need to work through the tactical implementation details, including resource requirements, assigned responsibilities, and timetables for implementation.
  - Publicize and sell the NRES Strategic Plan to key stakeholders and constituents.
  - Implement the plan.
  - Revisit your strategic analysis at least annually to ensure that you are implementing the plans that are of highest importance.
  - Formally celebrate NRES Department accomplishments. The NRES Department needs to reward itself for efforts and successes.

## STRENGTHS, WEAKNESSES, OPPORTUNITIES, AND THREATS (SWOT)

The NRES faculty and staff listed and ranked 75 strengths, 58 weaknesses, 63 opportunities, and 53 threats per the process defined above. The complete SWOT list is provided in Tietje (2013). Ten key items (not listed in any order of priority) for each SWOT category are shown below:

### Strengths

1. SAF accreditation of the FNR major and certification in all majors provides benefits to graduates and is recognized/valued by employers and agencies. The FNR program was initially accredited in 1994, re-accredited in 2004, and is seeking re-accreditation in 2014.
2. Each NRES program area provides an applied approach which is valued by students and employers.
3. NRES graduates have a solid reputation among employers for performance and promotion potential i.e., NRES graduates are career ready.
4. NRES helps student/graduates pursue great careers.
5. Excellent past, present and new opportunities for establishing collaboration with industry, agencies, and other universities (e.g., NRES Advisory Council, excellent current grantsmanship).
6. The current level of collegiality among faculty and staff creates an atmosphere that fosters visionary thinking.
7. Degree programs within the NRES Department have strong, challenging curricula with a learn-by-doing approach, which contributes to student success past graduation. There is a high variety of course offerings.
8. There is good enrollment in FNR, ENVM, and ENVM majors, and although the Soil Science program is small in comparison, it is the highest enrollment soil science program in the nation.
9. The NRES Department has great physical resources, which contribute to student success (e.g., Swanton Pacific Ranch and the Valencia forest, computer/GIS laboratories, greenhouses, Cal Poly land, and excellent forest/environmental science, water, and soil analysis laboratories)
10. NRES faculty have reputations as excellent teachers and productive in scholarly/professional activities. The NRES faculty have broad-based experiences in forestry, natural resources, hydrology, soil/earth sciences, and environmental management.

### Weaknesses

1. Reduced faculty positions;
2. NRES faces challenges with its graduate program (e.g., enrollment management, faculty work load);
3. There is a lack of critical mass (i.e., student enrollment) in what NRES faculty and others consider an excellent Soil Science program. What constitutes critical mass? What positive, supported changes can occur to reinvigorate the Soil Science program to attract more students?
4. Whereas both the previous NRM and ERSC departments have had major fund raising achievements (Al Smith Swanton Pacific Ranch, Swanton Pacific Timber Harvest, major financial donations to the new Math and Science Building), it is perceived that the new NRES department could do better in terms of acquiring more industry and private donations.
5. Fluctuating state budget over the past five years impact program management.
6. Insufficient faculty resources to meet competing course demands.
7. The NRES Department has limited depth in faculty expertise, and in some areas, lack expertise.
8. NRES Department reliance on part-time positions is too high.
9. Budget reductions and current turnover of an aging NRES faculty have created a severe stress on program administration.
10. The amount of work (teaching, service, research) that faculty are expected to do i.e., too many obligations are spread across too few faculty.

### Opportunities

1. Evolving technologies in land, ecosystem, and natural resources attribute assessment (e.g., GIS and remote sensing) create opportunities for our graduates.
2. New Math and Science Building provides new enhanced NRES facilities.
3. New faculty can bring new perspective and research potential.
4. Cal Poly has had a strong student admissions profile.
5. High school students attracted to “environmental” jobs.
6. Partnerships with industry and agencies (local, state, federal government) and other institutions have and will continue to be important

7. Increasing interest in environmental management, natural resources and forestry could lead to increased enrollment trends.
8. Many industries are interested in becoming “greener” creating new partnership opportunities for Cal Poly, CAFES, and the NRES Department.
9. Swanton Pacific Ranch and other Cal Poly land areas provide rich and unique learning environment for NRES students.
10. Potential to hire new faculty as a result of seven NRES FERP positions with the added benefit of overlap between retiring and new faculty (i.e., share ideas and wisdom).

#### Threats

1. National, state, CSU, and Cal Poly budget cuts have and are affecting department programs and capabilities.
2. Transition planning given the high number of retirements and FERPS could be impaired by resistance to refill positions.
3. Increasing dependence upon specific lecturers for required courses threatens the stability of our programs.
4. Faculty continually are asked to do more with less, leading to low morale and burnout. These time pressures threaten faculty effectiveness.
5. Research requirements are complicated due to 100% teaching requirement. Faculty are conducting research but have a hard time finding the time/money.
6. Lack of substantial, current advancement partners to offset the reduction in state support.
7. Campus risk management policies threaten certain NRES field oriented activities.
8. Graduate students are not fully funded like institutions.
9. Grant funding does not come back to the Department for adjusting faculty workloads
10. There is difficulty finding faculty applicants who have applied/practical experience.

## MISSION AND VISION OF THE NRES DEPARTMENT

The NRES Faculty and Staff after reflecting on the SWOT Analysis, began Part Two of the strategic planning effort (i.e., develop supported Vision and Mission statements). A committee was formed composed of Drs. Karen Vaughan, Priya Verma, Brent Hallock, and Richard Thompson to develop “draft” Vision and Mission statements. Significant discussion and editing occurred over several months. As a result of that good discussion, the following statements were developed.

**Vision Statement:** To be the premier educational and applied research programs in Natural Resources Management and Environmental Sciences in the Western United States. Approved by faculty vote, April 16, 2013.

**Mission Statement:** The mission the NRES Department is to graduate passionate, ethical leaders in the science and sustainable management of natural resources and the environment using a learn by doing approach. Approved by faculty vote, September 11, 2012

Amplifications of Mission Statement:

- ❑ Providing students with the academic background and critical thinking skills necessary to formulate and implement solutions to 21<sup>st</sup> century environmental challenges.
- ❑ Offering hands-on opportunities outside the classroom to enhance undergraduate and graduate student learning.
- ❑ Conducting multi-disciplinary research that improves our understanding of the coupling between social, political, and ecological systems.
- ❑ Promoting the use of scientific evidence to make informed policy and management decisions.
- ❑ Fostering partnerships with government agencies, corporations, nonprofit organizations, and communities to address critical issues, including climate change, energy, water quality, and ecosystem management.

## KEY STRATEGIC AREAS AND ACTION PLAN

The NRES Faculty and Staff after completing Parts One and Two, then set out to identify key strategic areas and an associated Action Plan. The Key Strategic Areas and their assigned committee members were identified as:

- ❑ Curriculum (John Harris, Richard Thompson, Scott Sink, Lynn Moody, Chip Appel)
- ❑ Student Enrollment (Samantha Gill, John Harris, Karen Vaughan, and Michael Jencks)
- ❑ Faculty Recruitment, Deployment, and Workload (Brian Dietterick, Samantha Gill, Lynn Moody, and Terry Smith)
- ❑ Facilities, Equipment and Safety (Jeff Reimer, Craig Stubler, Leslie Rebik, Lisa Wallravin, Wally Mark)
- ❑ NRES Graduate Program (NRES Faculty)
- ❑ Advancement (Doug Piirto, Chris Dicus, Leslie Rebik, and Brian Dietterick)

An Action Plan of key tasks for each of these key strategic areas is presented below:

### Curriculum

1. Review and evaluate existing undergraduate and graduate programs with regard to:
  - a. Achievement of learning outcomes
  - b. Efficiency of delivery given continuing budget reductions
  - c. Reducing the Unit Total requirement for the FNR major from 192 to 184
  - d. Eliminating work experience/internship as a required course
  - e. Cross linking and connecting courses and requirements for all four undergraduate programs and both graduate programs (e.g., establishing a uniform set of internship requirements for all NRES majors)
2. Develop FNR Self Study Report for SAF Accreditation Review
3. Schedule SAF Accreditation Site Visit to occur in Winter 2014
4. Examine options for earth and soil science major, e.g., merge, integrate, collaborate

### Student Enrollment

1. Evaluate effectiveness of existing recruiting methods for under-enrolled programs
2. Evaluate what recruitment methods actually work of today's prospective students
3. Synthesize and evaluate feeder networks to Cal Poly
4. Develop a common understanding of the connection (i.e., inter-related) between university, college, department and program recruitment methods). More specifically, how can department assist in recruiting for under-enrolled programs?
5. Evaluate why students change majors

### Faculty Recruitment, Deployment and Workload

1. Develop a NRES Hiring Plan and discuss at the 2012 Fall Conference
  - a. Review current and impending retirements with respect to areas of expertise
  - b. Identify short- and long-term faculty position needs
    - Short-Term—to cover current classes in curricula for the four undergraduate programs and two graduate programs
    - Long-Term—examine societal needs and concerns in forestry, natural resources and environmental science fields in relation to NRES Dept. faculty positions

### Facilities, Vehicles and Safety

1. Plan all related actions necessary to move into the new Math and Science Building (i.e., develop an Action Plan). The move is scheduled to occur in Summer 2013.
2. Order Group 2 equipment for the new Math and Science building (\$450,000)

3. Provide input for development of the new Education Center at Swanton Pacific Ranch
4. Develop NRES General Safety Plan which will include:
  - a. Risk Analysis procedures and forms for laboratories and field trips
  - b. Use of Student Volunteers as drivers (i.e., forms, process, etc.)
  - c. Storage protocols for department and research materials
5. Develop list of NRES Facilities and Space allocation. Develop a Plan which addresses needs and issues regarding use and maintenance.
6. Develop NRES Vehicle Maintenance and Replacement Plan. Funding will be needed to replace aging 15 passenger van with a 12 passenger van.

## NRES Graduate Program

1. Establish a list of long-term goals for NRES graduate programs
2. Develop a policy regarding faculty supervision of graduate students
3. Improve sense of community for NRES graduate students
4. Provide more recognition of NRES graduate students by:
  - a. Including photos and names of all NRES graduate students on NRES web site
  - b. Publicizing NRES graduate student achievements
  - c. Continuing to include graduate students and their achievements in the annual NRES Newsletter
5. Discuss out-of-state tuition waiver policies with Dr. Rich Savage and Cal Poly Graduate Coordinators' Committee
6. Develop NRES Department procedures regarding use of Graduate Student Teaching Assistants
7. Continue to provide office space for NRES graduate students. Increase where possible.
8. Consider development of NRES Master of Professional Studies program

## Advancement

Continue to encourage faculty to seek out grants to support learn by doing educational opportunities. Ask faculty to consider including some overhead for the NRES Department.

1. Work with NRES Advisory Council and entities like the Hind Foundation, Metropolitan Water District of Southern California, and industry to achieve more Learn by Doing opportunities (i.e., grants, donations, internships, etc.)
2. Continue to work with CAFES and University Advancement personnel to develop a coordinated NRES fund raising effort to support:
  - a. Student travel and registration at professional meetings (e.g., Soil Science Society of American annual meeting, Association of Environmental Professionals annual spring conference, Society of American Foresters annual national convention, Soil Judging national competition event, Logging Team AWFC annual event, ESRI annual conference, and more). Estimated annual fund raising \$40,000 goal
  - b. Annual equipment needs. Estimated annual fund raising \$25,000 goal
  - c. Vehicle transportation. Estimated annual \$50,000 goal
  - d. Discretionary annual needs \$15,000 goal
  - e. Swanton Pacific Ranch Student Housing Center. Estimated \$3,000,000 goal
  - f. Faculty Professional Development. Estimated annual fund raising goal \$30,000
  - g. Endowed Chairs for (not listed in any order of priority):
    - i. Applied Ecology. Estimated \$3,000,000 goal
    - ii. Urban Forestry. Estimated \$3,000,000 goal
    - iii. Forest Health. Estimated \$3,000,000 goal
    - iv. Forest Engineering and Utilization. Estimated \$3,000,000 goal
    - v. Earth and Soil Science with a focus on erosion. Estimated \$3,000,000 goal
    - vi. Environmental Management. Estimated \$3,000,000 goal



- vii. Disaster and Emergency Management. Estimated \$3,000,000 goal
- viii. Natural Resources Laws, Policies, and Regulations. Estimated \$3,000,000 goal
- 3. Consider developing a professional Master’s program similar to Leprino program in Dairy Science requesting support from the forest products industry. Estimated \$5,000,000 goal to cover the cost of an endowed professorship and costs of running the program.
- 4. Work with the University and CAFES Advancement in concert with the NRES Advisory Council to identify potential funding sources and advancement strategy.
- 5. Ask all NRES faculty, the Department Head, and Advisory Council members to take an active role in fund raising. Donations are made where good relationships are established. Recall the work we did with Al Smith as we helped him manage his Swanton Pacific Ranch. Al had a Vision for the property that “included” Cal Poly Learn by Doing opportunities. Many of us played a key role in building that relationship with Al that ultimately led to the Swanton Pacific Ranch donation. That had a major impact on our reputation and the quality of the programs we developed. Those relationships begin with enthusiastic interactions with folks interested in Cal Poly and our NRES Mission.

## NRES DEPARTMENT PERFORMANCE METRICS

The NRES Faculty and Staff have identified several metrics to gauge progress of the NRES department. Those metrics include: budget, enrollment, applications received, degrees awarded, graduation rates, faculty assignment data (FAD), and grantsmanship. Those metrics are presented below.

### NRES Department Budget

For Fiscal Year July 1, 2012 through June 30, 2013 the NRES departmental budget was approximately \$2.8 million minus salaries and operating expenses as shown below (Table 1). The budget shown in Table 1 below reflects budget allocations from July 1, 2012 to June 30, 2013. The carryover funds are needed to accommodate the move-in expenses to the new Math and Science building. Our budget situation is currently in the black and supportive of adding at least two new faculty positions.

Table 1—NRES 2012-13 Department Budget

	NRES Department 2012/13 Fiscal Year (100800)	CAFES 2012/13 Fiscal Year	NRES as a % of CAFES
601100 Academic Salaries	\$ 959,533.00	\$ 6,411,795.00	14.96%
601101 Dept. Chair	124,632.00	883,899.00	14.10%
601201 Mgmt. & Supervisory	63,000.00	671,080.00	9.38%
601300-601301 Support Staff Salaries	211,892.00	2,302,171.00	9.20%
601303 Student Assistant	48,357.00	401,843.00	12.03%
601304 Teaching Associate	3,467.00	30,017.00	11.55%
601805, 601301 Lecturers	195,383.00	1,901,232.00	10.27%
Release (Salaries & Benefits)	-73,180.00	-621,185.00	11.78%
Benefits	526,724.00	5,153,314.00	10.22%
<b>Total Employee Compensation</b>	<b>\$ 2,059,808.00</b>	<b>\$ 17,134,166.00</b>	<b>12.02%</b>
Supplies & Services	118,256.00	1,028,665.00	11.49%
Travel 606001, 606002	23,402.00	137,830.00	16.97%
<b>*Total</b>	<b>\$ 2,201,466.00</b>	<b>\$ 18,300,661.00</b>	<b>12.02%</b>

## Enrollment

The enrollment for each of the four NRES undergraduate majors is shown in Table 2. Enrollment trends are very good for the FNR, ENVM and ERSC majors. NRES faculty and staff are fully aware of the enrollment challenges for the Soil Science major. In that context, the NRES faculty agreed in Spring 2013 to merge the Earth and Soil Sciences (ERSC) program with the Soil Science (SS) program seeking approval for the 2015/17 catalog. The NRES faculty and staff believe that merging the two majors will reinvigorate both existing majors (i.e., ERSC and SS) creating an exciting new Environmental Earth and Soil Sciences major that will be attractive to more prospective students.

Table 2—*Enrollment by Major and NRES Total (2008 to 201#)*

Major	FALL 08	FALL 09	FALL 10	FALL 11	FALL 12	FALL 13
ENVM	174	193	189	219	201	220
ERSC	83	102	111	113	114	133
FNR	183	177	192	208	186	183
SS	46	44	33	39	38	36
<b>NRES Total</b>	<b>486</b>	<b>516</b>	<b>525</b>	<b>579</b>	<b>539</b>	<b>572</b>

## Degrees Awarded

Degrees awarded are shown in Table 3 below.

Table 3—*Number of Bachelor's Degrees Awarded, 2006-07 Through 2011-12*

Major	Award Year					
	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
ENVM	9	15	16	32	41	53
ERSC	14	17	12	12	12	28
FNR	39	34	35	40	31	38
SS	3	6	11	5	3	10

## Number of Undergraduate Applications

The number of applications received for each NRES undergraduate program area is shown in Table 4. Interest by prospective students as exemplified by their submission of an application to Cal Poly indicates:

1. Increasing interest for the ENVM major;
2. Stable interest with a significant increase in the 2013/14 AY for the ERSC major;
3. Increasing interest in the FNR major;
4. Low but stable interest in the Soil Science major;
5. Increasing interest for NRES programs in general (i.e., 318 applications in 2006/07 to 796 applications in 2013/14); and
6. That 18% of the CAFES applications are for NRES programs.

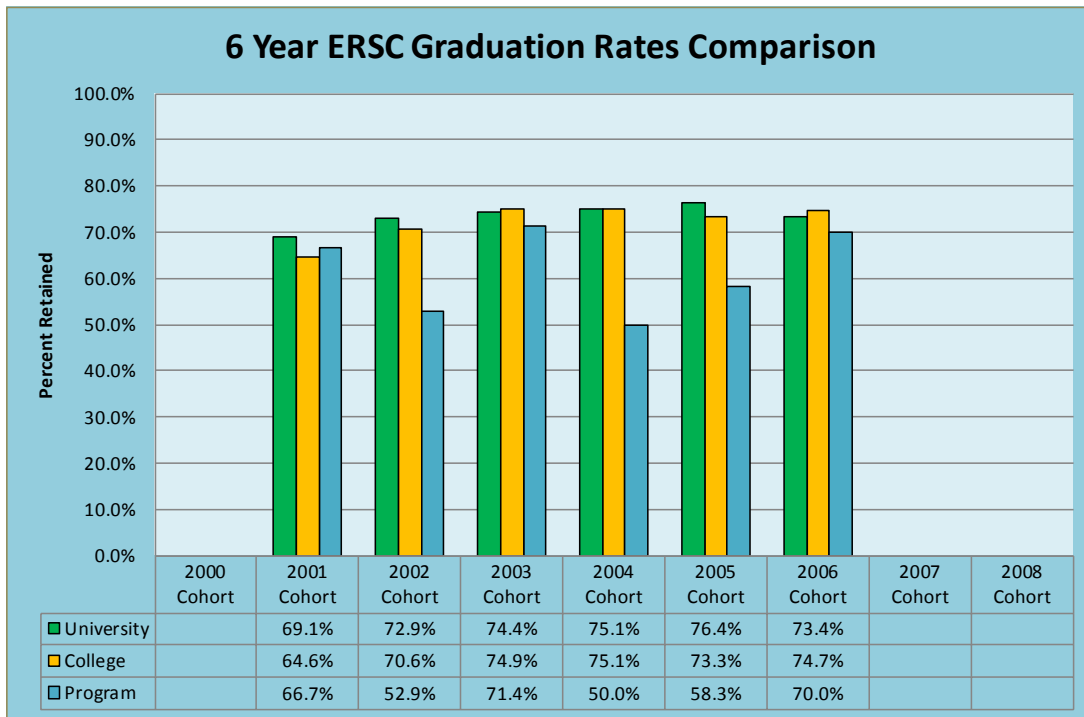
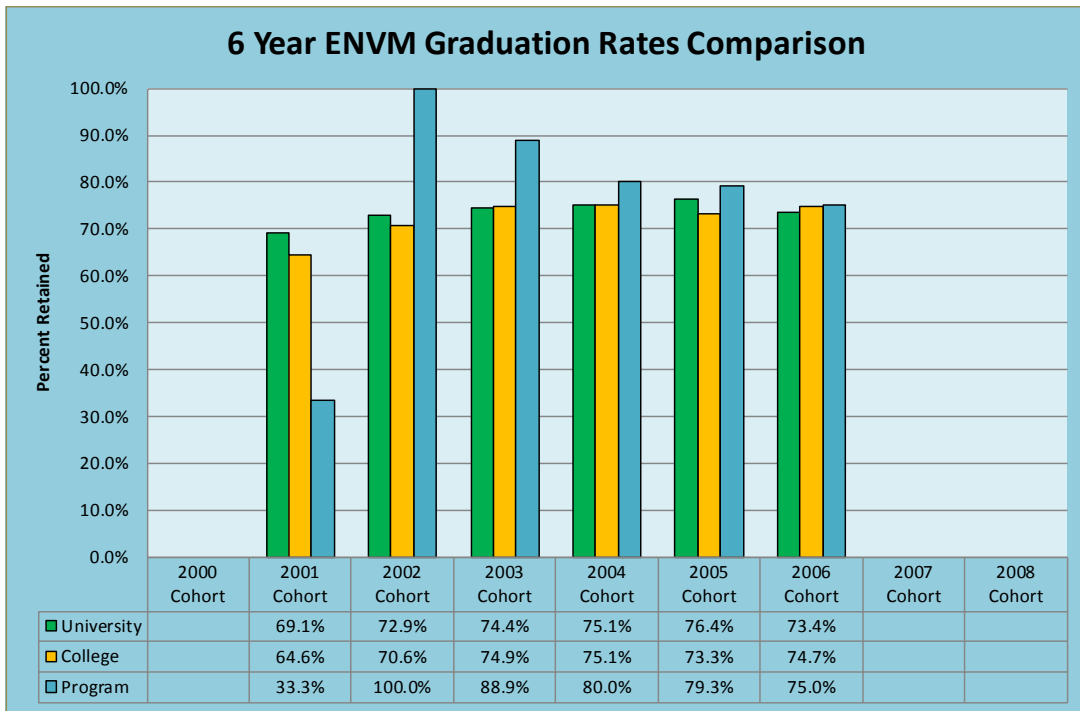
Table 4—Number of Undergraduate Applications Received, 2006-07 Through 2011-12  
(Key: FTF = First time freshmen, NTR = New transfer)

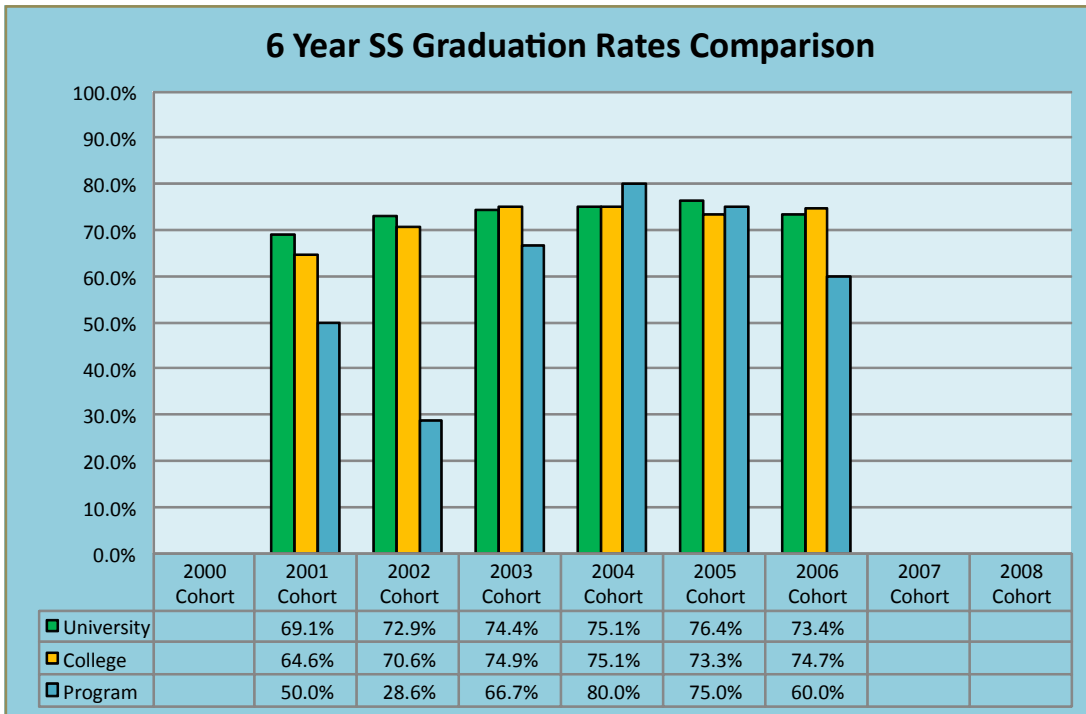
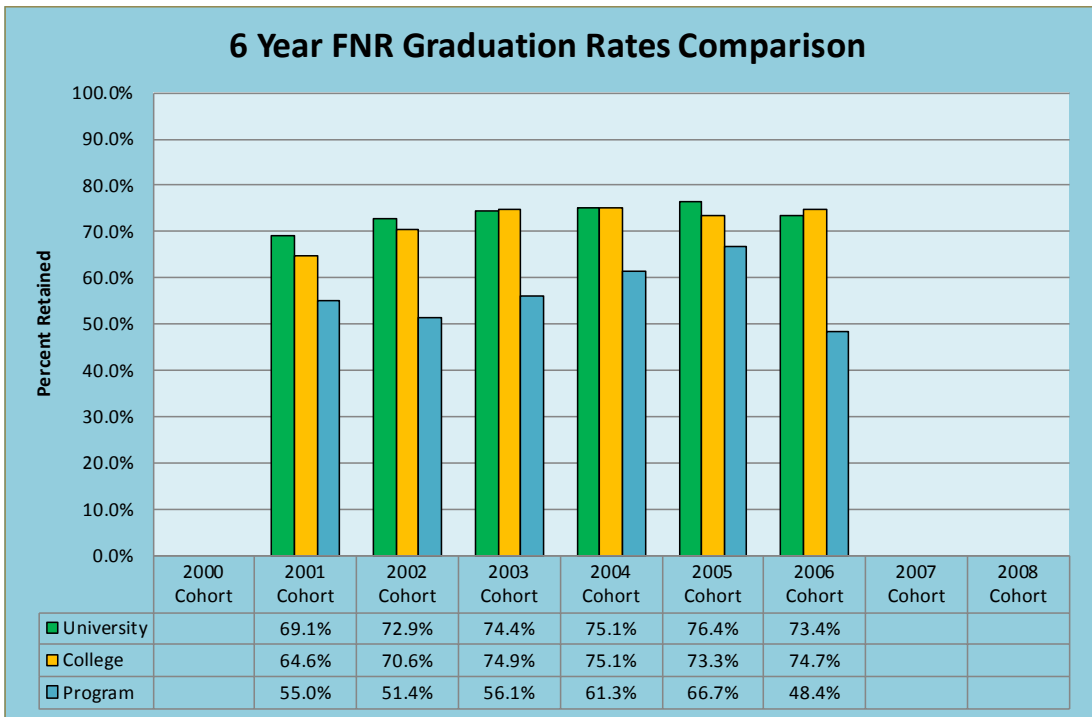
Major	Application Year								
	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	
	<b>Student Type</b>								
ENVM	FTF	134	151	284	335	336	365	391	413
	NTR	21	26	26	35	56	53	46	57
ERSC	FTF	67	72	49	63	74	79	76	120
	NTR	11	9	7	21	17	15	27	20
FNR	FTF	99	88	135	127	121	118	143	163
	NTR	25	22	31	39	56	474	64	42
SS	FTF	18	25	28	14	26	22	30	30
	NTR	6	3	4	4	4	6	3	4
NRES	FTF	318	336	496	539	557	584	640	726
	NTR	63	60	68	99	133	121	140	123
CAFES	FTF	2,379	2,574	3,137	3,115	3,300	3,220	3,600	4,022
	NTR	473	469	507	673	914	872	908	892
CAL POLY	FTF	26,733	30,140	33,334	31,479	33,264	32,995	36,919	40,388
	NTR	4,223	4,055	4,459	5,165	7,293	6,851	7,508	8,080

### Graduation Rates (Six Year Rates)

The six-year graduation rates for each of the four NRES undergraduate programs are shown in the four figures that follow. The graduation rate(s) for:

1. ENVM is 75% for the 2006 cohort. This is comparable to both the CAFES and Cal Poly averages.
2. ERSC is 70% for the 2006 cohort, which is an improvement over previous years. This rate too is comparable to CAFES and Cal Poly averages.
3. FNR have been generally increasing, but are below CAFES and Cal Poly averages.
4. SS have been generally increasing, but remain below CAFES and Cal Poly averages.





## NRES Faculty Assignment Data (FAD)

NRES Faculty Assignment Data (FAD) are presented in Table 5 below. Summarizing:

1. Total assignments: Fall 2012 - 23; Winter 2013 - 27; Spring 2013 - 24;
2. Full-time: Fall 2012 - 10; Winter 2013 - 13; Spring 2013 - 9;
3. Part-time: Fall 2012 - 13; Winter 2013 - 14; Spring 2013 - 15;
4. Total FTEF: Fall 2012 - 14.66; Winter 2013 - 17.38; Spring 2013 - 15.61;
5. Full-time Academic Year SCU generation = 6511.2 (55.4%);
6. Part-time Academic Year SCU generation = 5246.5 (44.6%); and
7. Total SCU Academic Year generation = 11757.7.

Table 5—NRES Faculty Assignment Data

Faculty	Number	FTEF	Class	Supervsn	Total	Direct	Total	Total FTES	SCU/FTEF	SFR
Type	Assignments		WTU	WTU	WTU	WTU/FTEF	SCU			
<b>Fall 2012</b>										
<b>Full Time</b>	10	9.500	84.10	10.60	94.70	9.96	2160.60	144.50	227.43	15.21
<b>Part Time</b>	13	5.166	71.80	1.50	73.30	14.18	1574.50	105.66	304.78	20.45
<b>Grad Assts</b>	0	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Subtotal</b>	23	14.666	155.90	12.10	168.00	11.45	3735.10	250.16	254.67	17.06
<b>Other</b>	0	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	23	14.666	155.90	12.10	168.00	11.45	3735.10	250.16	254.67	17.06
<b>Winter 2013</b>										
<b>Full Time</b>	13	11.850	128.00	11.90	139.90	11.80	2357.40	158.77	198.93	13.40
<b>Part Time</b>	14	5.539	80.50	1.00	81.50	14.71	1617.00	108.39	291.93	19.57
<b>Grad Assts</b>	0	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Subtotal</b>	27	17.389	208.50	12.90	221.40	12.73	3974.40	267.16	228.55	15.36
<b>Other</b>	0	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	27	17.389	208.50	12.90	221.40	12.73	3974.40	267.16	228.55	15.36
<b>Spring 2013</b>										
<b>Full Time</b>	9	7.684	90.60	15.30	105.90	13.78	1993.20	133.72	259.39	17.40
<b>Part Time</b>	15	7.477	107.20	3.20	110.40	14.76	2055.00	137.39	274.84	18.38
<b>Grad Assts</b>	0	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Subtotal</b>	24	15.161	197.80	18.50	216.30	14.26	4048.20	271.09	267.01	17.88
<b>Other</b>	0	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	24	15.161	197.80	18.50	216.30	14.26	4048.20	271.09	267.01	17.88

## NRES Grantsmanship

The NRES Faculty are incredibly productive in terms of bringing in grants. That success record is reflected below in Table 5. Over the last ten academic years (2002/03 through 2012/13), the NRES Faculty have brought in \$11,248,055 of grants funds and \$124,956 of cash gifts from industry.

Table 6—NRES Grants and Contracts

NRES Grants and Contracts 2002 – 2013 by Academic Year and Funding Type						Cash Gifts from Industry
Year	Federal	Non-Profit	Private For-Profit	State	Sum of Total Award	Cash Gift Amount
<b>2002-2003</b>	\$ 199,339	\$ 10,000	\$ 10,000	\$ 983,269	\$ 1,202,608	
2003-2004	235,839			990,469	1,226,308	
2004-2005	188,768			496,635	685,403	\$ 4,000
2005-2006	176,899			1,262,069	1,438,968	30,000
2006-2007	150,700	1,000		240,158	391,858	32,500
2007-2008	424,226	9,993		1,056,773	1,490,992	15,000
2008-2009	151,874		29,783	1,565,164	1,746,821	16,075
2009-2010	1,166,955			643,926	1,810,881	
<b>2010-2011</b>	192,257			310,979	503,236	24,381
2011-2012	135,385	65,008		267,345	467,738	3,000
2012-2013	176,106			107,136	283,242	
<b>Grand Total</b>	<b>\$ 3,198,348</b>	<b>\$ 86,001</b>	<b>\$ 39,783</b>	<b>\$ 7,923,923</b>	<b>\$ 11,248,055</b>	<b>\$ 124,956</b>

## KEY FINDINGS AND NEEDS

The NRES Faculty and Staff will focus on all of the work items listed in the Key Strategic Areas and Action Plan section of this report. We have already made major progress on a number of those listed Action Items. It is clear from the information presented in this report that:

1. There is an over reliance on part-time positions (44.6%) to deliver the ENVM, ERSC, FNR and SS programs.
2. NRES Faculty and Staff believe a major current weakness is faculty understaffing. As stated earlier in this report, there are too many obligations spread across too few faculty in the NRES Department given current programs and work expectations.
3. There is an urgent need to fill at least two more positions in the applied ecology with advanced land measurement technology expertise (e.g., GIS, GPS) and in the Earth/Soil Sciences areas. Our budget projections indicate that we can support at least two more positions, realizing that we have seven current FERP positions.

The NRES Department is a nationally recognized department known for its expertise and programs in forestry, natural resources, environmental management, soil and earth sciences. We believe we can go to an even higher performance level with additional strategic planning focus and improved faculty position management (i.e., effective transition management to replace existing FERP positions). Maintaining and enhancing our NRES programs to provide quality student learning experiences is key to achieving our adopted Mission Statement. We must:

1. Keep the undergraduate and graduate students at the center of our attention showing respect at all times;
2. Be optimistic about our future;
3. Maintain focus on the context of Cal Poly, CAFES and our NRES Department;
4. Balance our involvement in new initiatives with time and budget realities;
5. Be opportunistic;
6. Focus on providing quality programs, understanding that we are preparing students for their future;
7. Remain flexible;
8. Focus on our strengths;

9. Be thoughtful in relation to understanding the full range of work associated with providing quality programs;
10. Be realistic in terms of setting ambitious and achievable goals;
11. Remain consistent with what we agreed to in our NRES Department Reorganization Memorandum of Reorganization; and
12. Strive to always stay tied to our professions via our NRES Advisory Council and our professional development activities.

Working together, NRES will prevail.

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