

# ENROLLMENT TRENDS IN NATURAL RESOURCES DEGREE PROGRAMS IN THE U.S. WITH AN EMPHASIS ON DIVERSITY

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**FAEIS**

Food and Agricultural Education Information Systems

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# Key References

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- Sharik, T. L., R. J. Lillieholm, W. W. Richardson, and W. E. Lindquist. 2015. Undergraduate enrollment in U.S. natural resource academic programs: Trends, drivers, and implications for the future of the profession. *Journal of Forestry* 113 (6):538-551.
- Sharik, T. L. 2015. Strategies for diversifying student demographics in natural resources. *Journal of Forestry* 113 (6):579-580.

**Status of NAUFRP Institutions Contributing to FAEIS database.**

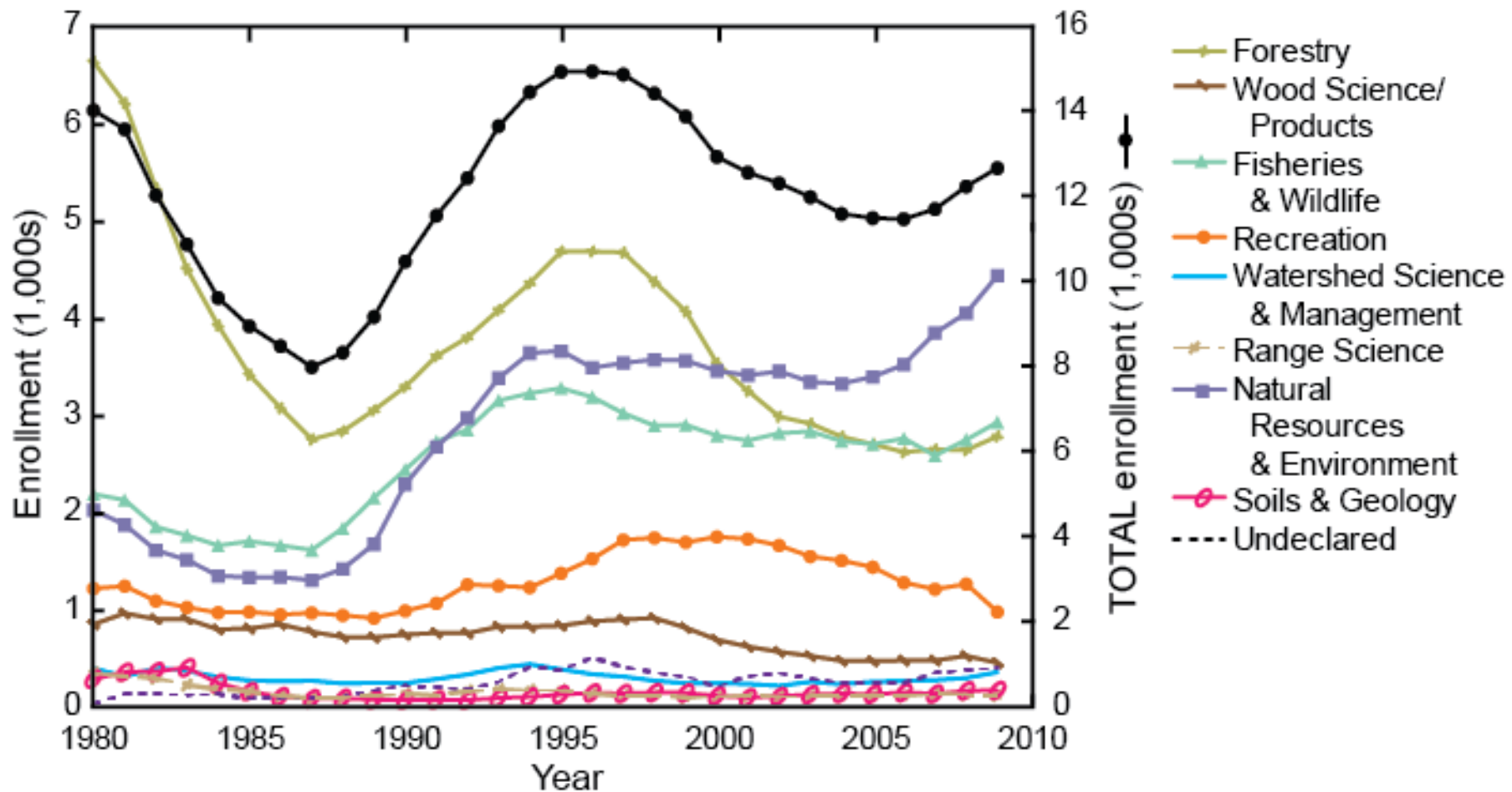
Institution Name	TYPE	Region	2013 - 2017 Graduate Status	2013-2017 Undergraduate Status
Alabama Agricultural and Mechanical University	1890	South	Not Offered	Incomplete Data
Alcorn State University	1890	South	Not Offered	Not Offered
American Samoa Community College	1862	West	Not Offered	Complete
Auburn University	1862	South	Complete	Complete
California Polytechnic State University, San Luis Obispo	NLG	West	Complete	Complete
Clemson University	1862	South	Complete	Complete
Colorado State University	1862	West	Complete	Complete
Cornell University	1862	North-East	Complete	Complete
Delaware State University	1890	North-East	Incomplete Data	Incomplete Data
Duke University	PVT	South	No Data	No Data
Florida A and M University	1890	South	Incomplete Data	Incomplete Data
Fort Valley State University	1890	South	Not Offered	Not Offered
Humboldt State University	NLG	West	Complete	Complete
Iowa State University	1862	North-Central	Complete	Complete
Kansas State University	1862	North-Central	Not Offered	Complete
Kentucky State University	1890	South	Incomplete Data	No Data
Lincoln University of Missouri	1890	North-Central	Complete	Complete
Louisiana State University	1862	South	Complete	Complete
Louisiana Tech University	NLG	South	Not Offered	Complete
Michigan State University	1862	North-Central	Complete	Complete
Michigan Technological University	NLG	North-Central	Complete	Complete
Mississippi State University	1862	South	Complete	Complete
New Mexico State University	1862	West	Complete	Complete
North Carolina Agricultural and Technical State University	1890	South	Not Offered	Not Offered
North Carolina State University at Raleigh	1862	South	Complete	Complete
North Dakota State University	1862	North-Central	Complete	Complete
Northern Arizona University	NLG	West	Complete	Complete
Oklahoma State University	1862	South	Complete	Complete
Oregon State University	1862	West	Complete	Complete
Paul Smith's College of the Adirondacks	PVT	North-East	Not Offered	Complete
Purdue University	1862	North-Central	Complete	Complete
Rutgers University- New Brunswick	1862	North-East	Complete	Complete
Salish Kootenai College	1994	West	Not Offered	Complete
South Dakota State University	1862	North-Central	Incomplete Data	Incomplete Data
Southern Illinois University-Carbondale	NLG	North-Central	Complete (Will Apply Remedy)	Complete (Will Apply Remedy)
Southern University and Agricultural and Mechanical College	1890	South	No Data	No Data
Stephen F. Austin State University	NLG	South	Complete	Complete(Would like confirmation)
SUNY College of Environmental Science and Forestry	NLG	North-East	Complete	Complete
Tennessee State University	1890	South	Not Offered	Not Offered
Texas A&M University	1862	South	Complete	Complete

The Ohio State University	1862	North-Central	Complete	Complete
The Pennsylvania State University	1862	North-East	Complete (Will Apply Remedy)	Complete (Will Apply Remedy)
The University of Montana-Missoula	NLG	West	Complete (Will Apply Remedy)	Complete (Will Apply Remedy)
The University of Rhode Island	1862	North-East	Complete	Complete
Tuskegee University	1890	South	Incomplete Data	Incomplete Data
University of Alaska- Fairbanks	1862	West	Complete	Complete
University of Arizona	1862	West	Complete	Complete
University of Arkansas at Monticello	NLG	South	Incomplete Data	Incomplete Data
University of California- Berkeley	1862	West	Complete	Complete
University of Connecticut	1862	North-East	Complete	Complete
University of Delaware	1862	North-East	Complete	Complete
University of Florida	1862	South	Incomplete Data	Incomplete Data
University of Georgia	1862	South	Complete	Complete
University of Guam	1862	West	Incomplete Data	Not Offered
University of Hawaii at Manoa	1862	West	Incomplete Data	Incomplete Data
University of Idaho	1862	West	Complete	Complete
University of Illinois at Urbana-Champaign	1862	North-Central	Complete (Will Apply Remedy)	Complete (Will Apply Remedy)
University of Kentucky	1862	South	Complete	Complete
University of Maine	1862	North-East	Complete	Complete
University of Maryland Eastern Shore	1890	North-East	No Data	No Data
University of Massachusetts	1862	North-East	Complete	Complete
University of Michigan- Ann Arbor	NLG	North-Central	Incomplete Data	No Data
University of Minnesota- St. Paul	1862	North-Central	Complete	Complete
University of Missouri	1862	North-Central	Complete (Will Apply Remedy)	Complete (Will Apply Remedy)
University of Nebraska- Lincoln	1862	North-Central	Complete	Complete
University of Nevada- Reno	1862	West	Complete	Complete
University of New Hampshire	1862	North-East	Complete (Will Apply Remedy)	Incomplete Data
University of Puerto Rico - Mayaguez	1862	South	No Data	No Data
University of Tennessee	1862	South	Complete	Complete
University of the Virgin Islands	1862	South	Complete	Not Offered
University of Vermont	1862	North-East	Complete	Complete
University of Washington- Seattle	NLG	West	Complete	Complete
University of Wisconsin- Madison	1862	North-Central	Complete	Complete
University of Wisconsin- Stevens Point	NLG	North-Central	Waiting on Confirmation of Data	Waiting on Confirmation of Data
University of Wyoming	1862	West	Complete	Complete
Utah State University	1862	West	Complete	Complete
Virginia Polytechnic Institute and State University	1862	South	Complete	Complete
Washington State University	1862	West	Complete	Complete
West Virginia State University	1890	North-East	Not Offered	Not Offered
West Virginia University	1862	North-East	Complete	Complete

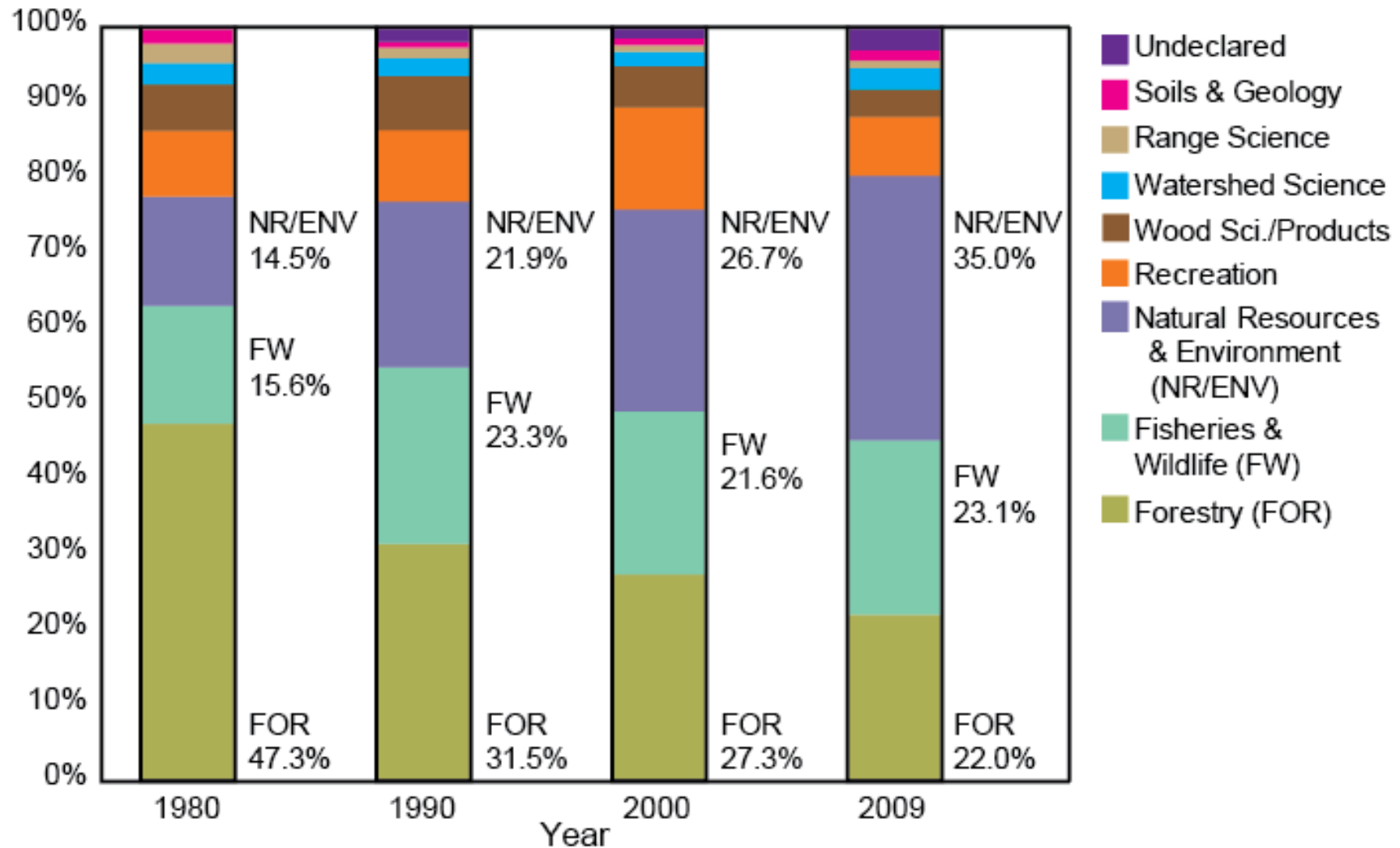
# Undergraduate Enrollment



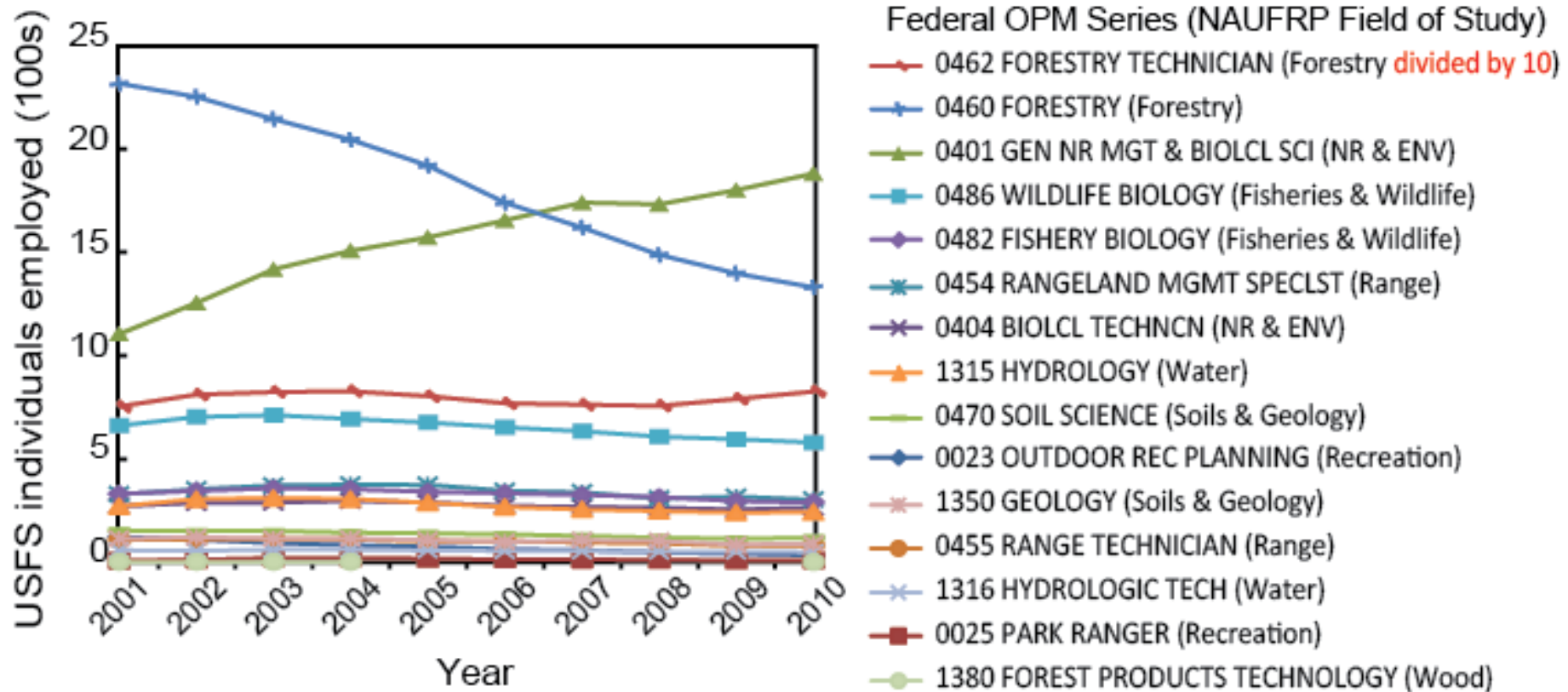
# Undergraduate NR enrollment by field of study at 31 NAUFRP institutions, 1980–2009.



# Proportion of undergraduate NR enrollment in various fields of study at 31 NAUFRP institutions for 1980, 1990, 2000, and 2009.

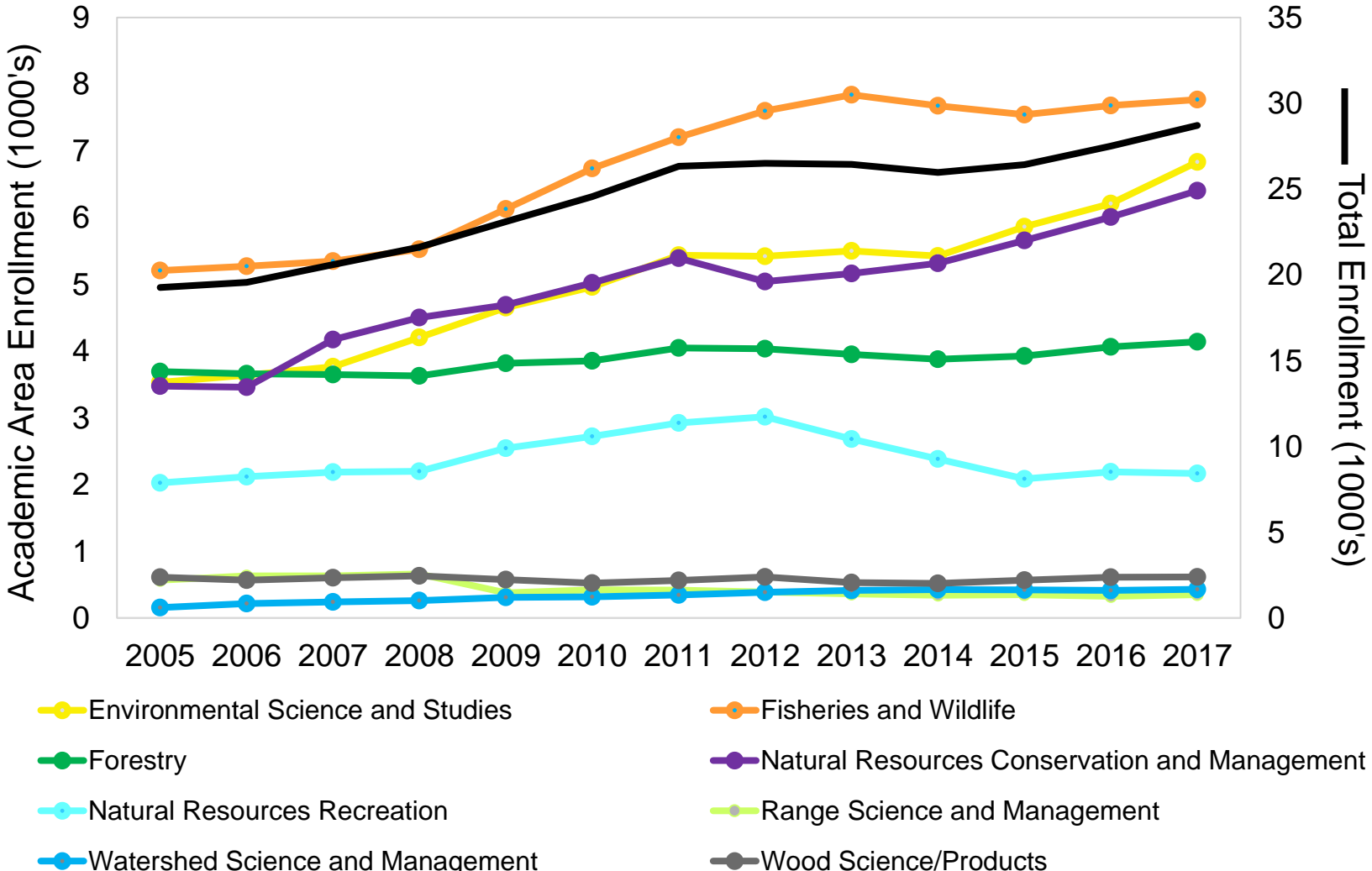


# USDA Forest Service employment in NR-related job series, 2001–2010 (USDA Forest Service, unpubl. data, 2010, file date Apr. 24, 2011).



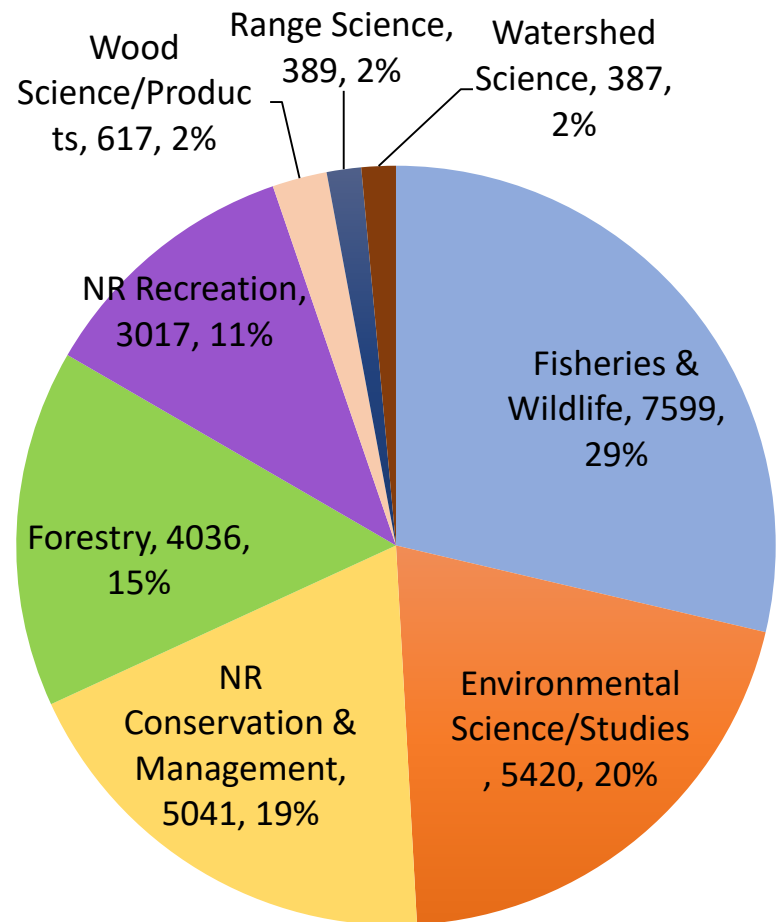


# Undergraduate NR enrollment by academic area at 61 NAUFRP institutions, 2005–2017 (FAEIS October 1, 2019).

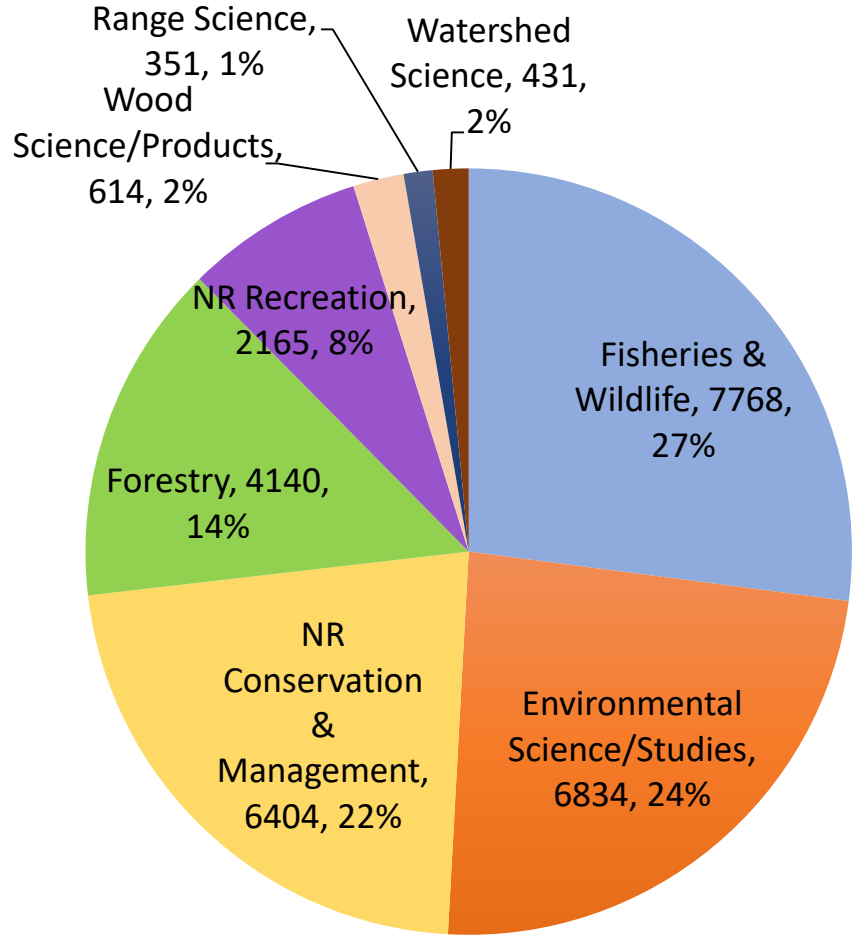


# Proportion of NR undergraduates enrolled in various academic areas at 61 NAUFRP institutions, 2012 & 2017 (FAEIS October 1, 2019).

**2012**  
**(n=26,506)**



**2017**  
**(n=28,707)**



# Gender



# Gender Context

- Among 15 major disciplines recognized by the U.S. Census Bureau, at 30% Agriculture and Natural Resources is second only to Engineering in the lowest percent of females with bachelor's degrees in the workforce (Carnevale et al. 2011).
- Among the 10 Agriculture and Natural Resources sub-disciplines, Forestry has the lowest percent females at 17%.
- About 55% of all undergraduates in the U.S. in all disciplines are women.

# Undergraduate NR enrollment by gender for 61 Institutions, (FAEIS, only complete data, October 1, 2019), 2005–2017, excluding unknown gender.

Gender	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<b>Female</b>	5,891	6,342	6,783	7,207	8,172	8,900	10,561	10,801	10,866	11,070	11,608	12,088	13,135
%	<b>34.8</b>	34.7	35.9	37.8	39.3	39.6	41.0	41.1	41.8	43.4	44.6	44.8	<b>46.6</b>
Male	11,04	11,954	12,111	11,873	12,629	13,571	15,189	15,502	15,150	14,429	14,421	14,873	15,048
%	65.2	65.3	64.1	62.2	60.7	60.4	59.0	58.9	58.2	56.6	55.4	55.2	53.4
<b>Total</b>	<b>16,925</b>	<b>18,296</b>	<b>18,894</b>	<b>19,080</b>	<b>20,801</b>	<b>22,471</b>	<b>25,750</b>	<b>26,303</b>	<b>26,016</b>	<b>25,499</b>	<b>26,029</b>	<b>26,961</b>	<b>28,183</b>

# Undergraduate enrollment in NR programs at 61 NAUFRP institutions (with completed data) by academic area and gender, 2012 & 2017, excluding unknown gender.

Areas	2012		2017	
	Female	Male	% Female	% Female
Environmental Science & Studies	2,841	2,531	52.9	57.6
Fisheries & Wildlife	3,484	4,114	45.9	50.4
NR Conservation & Management	2,358	2,661	47.0	51.3
NR Recreation	1,038	1,978	34.4	39.7
Range Science & Management	131	257	33.8	42.5
Watershed Science & Management	126	261	32.6	34.6
Wood Science/Products	131	486	21.2	25.6
Forestry	692	3,214	17.7	23.0
<b>Total</b>	<b>10,801</b>	<b>15,502</b>	<b>41.1</b>	<b>46.6</b>

Data from FAEIS database, October 1, 2019.

# Race / Ethnicity

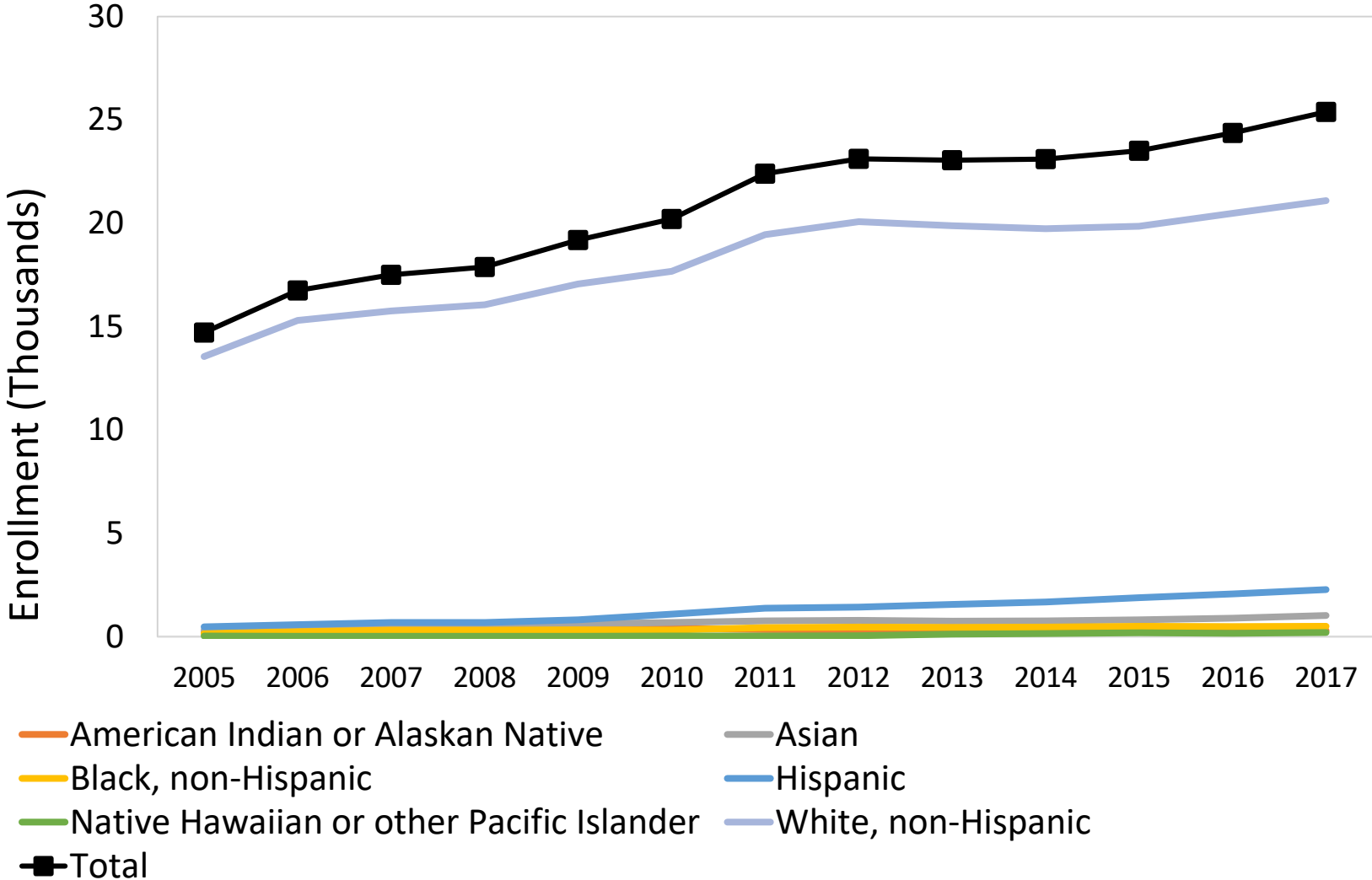
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# Race/Ethnicity Context

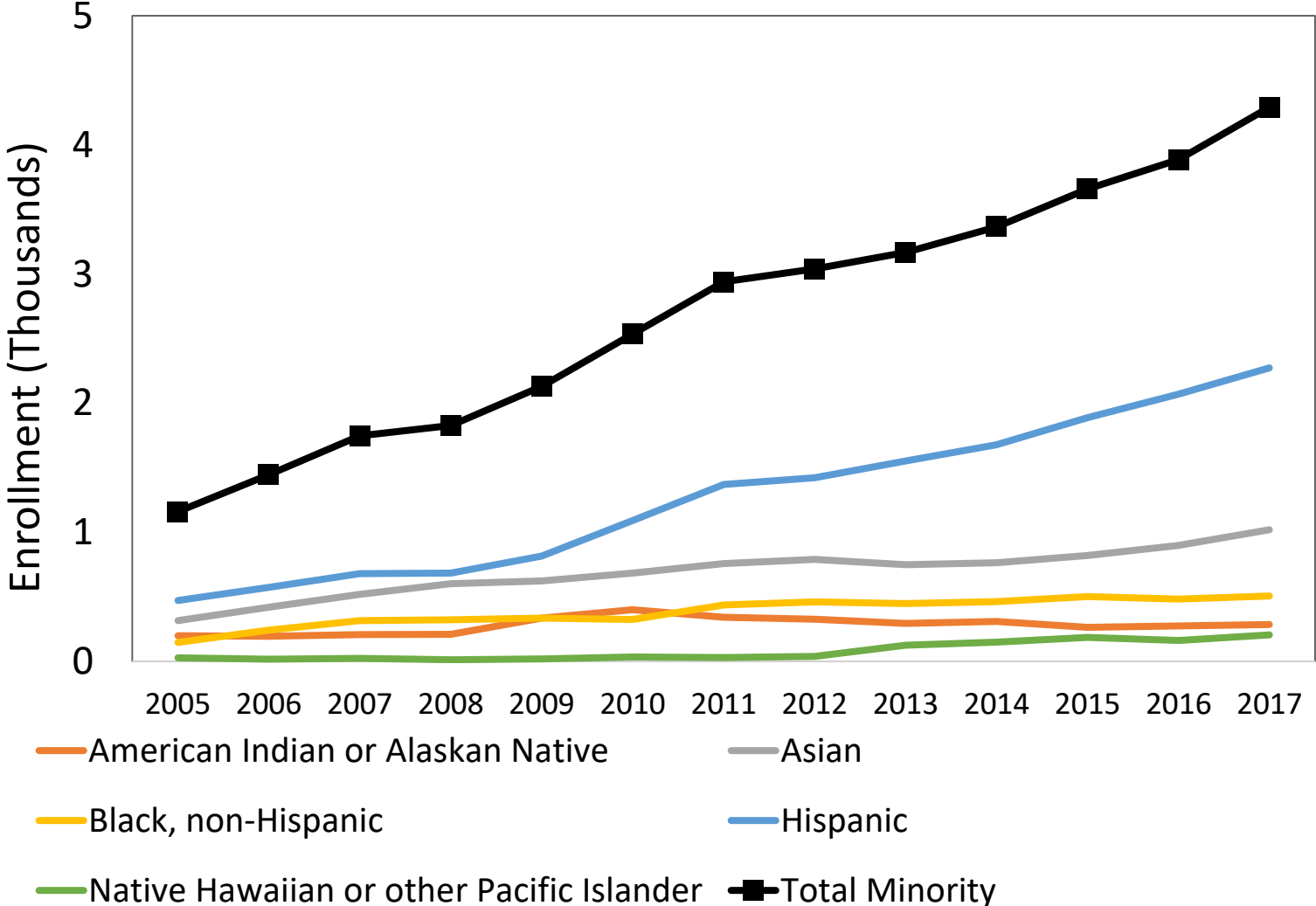
- Among 15 major disciplines recognized by the U.S. Census Bureau, at 10% Agriculture and Natural Resources has the lowest percent of minorities with bachelor's degrees in the workforce (Carnevale et al. 2011).
- Among the 10 Agriculture and Natural Resources sub-disciplines, Forestry has the lowest percent minorities in the workforce at 7%.
- About one-third of all undergraduates in the U.S. in all disciplines are minorities.



# Total undergraduate enrollment in NR programs by race/ethnicity from 61 NAUFRP Institutions, FAIES dataset, 2005–2017 (excluding non-US citizens, two or more races, unknown and unspecified).



**Total minority undergraduate enrollment in NR programs by race/ethnicity from 61 NAURFP Institutions, FAIES dataset, 2005–2017 (excluding non-Hispanic white, non-US citizens, two or more races, unknown and unspecified).**



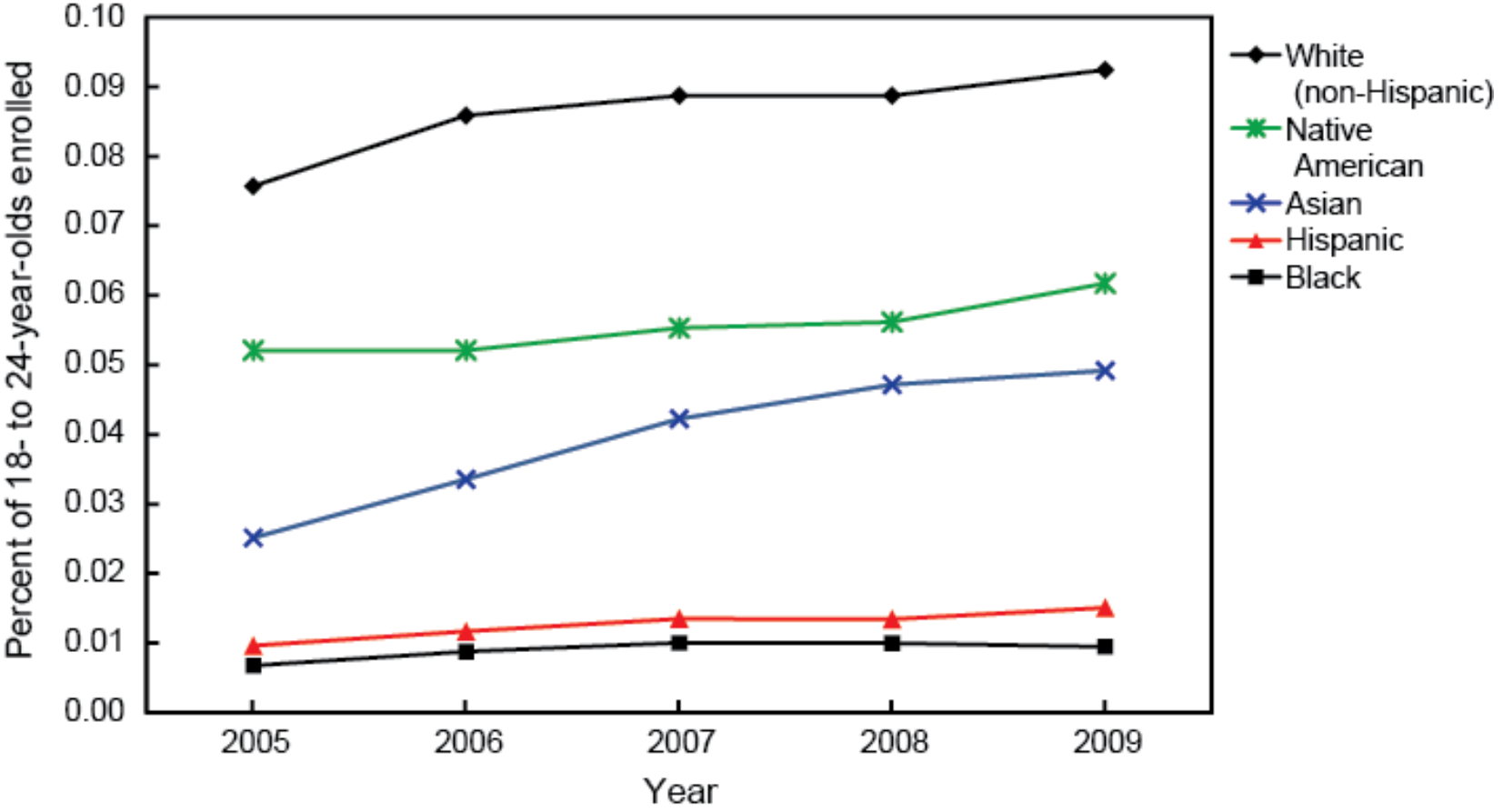
# Total and Percent undergraduate enrollment in NR programs by race/ethnicity from 61 NAUFRP Institutions, FAIES dataset, 2005–2017 (excluding non-US citizens, two or more races).

Race/Ethnicity	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
American Indian or Alaskan Native	198 (1.0)	194 (1.0)	208 (1.0)	209 (1.0)	336 (1.5)	400 (1.6)	342 (1.3)	327 (1.3)	294 (1.2)	309 (1.2)	263 (1.0)	274 (1.1)	286 (1.1)
Asian	315 (1.6)	419 (2.2)	520 (2.5)	601 (2.8)	624 (2.7)	685 (2.8)	757 (2.9)	789 (3.1)	749 (2.9)	765 (3.1)	820 (3.3)	898 (3.4)	1020 (3.8)
Black, non-Hispanic	147(0.8)	243 (1.3)	316 (1.5)	322 (1.5)	336 (1.5)	325 (1.3)	438 (1.7)	461 (1.8)	448 (1.8)	464 (1.9)	502 (2.0)	482( 1.8)	506 (1.9)
Hispanic	472 (2.5)	573 (2.9)	679 (3.3)	684 (3.2)	815 (3.6)	1090 (4.5)	1371 (5.3)	1423 (5.5)	1552 (6.1)	1677 (6.8)	1888 (7.5)	2069 (7.9)	2273 (8.4)
Native Hawaiian or other Pacific Islander	28 (0.1)	18 (0.1)	24 (0.1)	12 (0.1)	20 (0.1)	34 (0.1)	31 (0.1)	39 (0.2)	125 (0.5)	149 (0.6)	186 (0.7)	162 (0.6)	206 (0.8)
Unknown Ethnicity	4372 (22.8)	2602 (13.4)	2869 (14.0)	3371 (15.7)	3492 (15.3)	3797 (15.6)	3174 (12.3)	2458 (9.6)	2355 (9.2)	1614 (6.5)	1516 (6.0)	1719 (6.6)	1650 (6.1)
Unspecified Minority	69 (0.4)	81 (0.4)	82 (0.4)	214 (1.0)	208 (0.9)	283 (1.2)	307 (1.2)	151 (0.6)	148 (0.6)	48 (0.2)	47 (0.2)	10 (0.0)	84 (0.3)
White, non-Hispanic	13548 (70.8)	15297 (78.7)	15749 (77.0)	16050 (74.8)	17055 (74.5)	17674 (72.8)	19451 (75.2)	20074 (78.0)	19873 (77.8)	19736 (79.7)	19847 (79.2)	20476 (78.5)	21095 (77.8)
<b>Total</b>	<b>19,149</b>	<b>19,427</b>	<b>20,447</b>	<b>21,463</b>	<b>22,886</b>	<b>24,288</b>	<b>25,871</b>	<b>25,722</b>	<b>25,544</b>	<b>24,762</b>	<b>25,069</b>	<b>26,090</b>	<b>27,120</b>
<b>Total Minority</b>	<b>1229 (6.4)</b>	<b>1528 (7.9)</b>	<b>1829 (8.9)</b>	<b>2042 (9.5)</b>	<b>2339 (10.2)</b>	<b>2817 (11.6)</b>	<b>3246 (12.5)</b>	<b>3190 (12.4)</b>	<b>3316 (13.0)</b>	<b>3412 (13.8)</b>	<b>3706 (14.8)</b>	<b>3895 (14.9)</b>	<b>4375 (16.1)</b>

# U.S. Population of 18- to 24-year olds by race/ethnicity, 2005 to 2009.

	2005	2006	2007	2008	2009
<b>White, Non-Hispanic</b>	18,057,079 (61.9%)	18,074,501 (61.7%)	18,125,260 (61.5%)	18,235,034 (61.2%)	18,335,329 (60.8%)
<b>Hispanic</b>	5,145,678 (17.7%)	5,196,018 (17.7%)	5,247,627 (17.8%)	5,360,039 (18.0%)	5,502,605 (18.2%)
<b>Black</b>	4,340,582 (14.9%)	4,393,557 (15.0%)	4,466,142 (15.2%)	4,576,954 (15.4%)	4,676,303 (15.5%)
<b>Asian and Pacific Islander</b>	1,241,298 (4.3%)	1,239,657 (4.2%)	1,242,635 (4.2%)	1,251,080 (4.2%)	1,261,022 (4.2%)
<b>American Indian/Alaskan Native</b>	366,761 (1.3%)	372,658 (1.3%)	378,035 (1.3%)	382,971 (1.3%)	387,389 (1.3%)

**Undergraduate NR enrollment at 67 NAUFRP institutions by race/ethnicity as a percentage of the 18- to 24-year-old population in each group, 2005–2009 (US Census Bureau 2010, U.S. Department of Education 2010; [FAEIS](#) database, Apr. 12, 2010).**



# Undergraduate NR enrollment by academic area and race/ethnicity at 61 NAUFRP institutions (FAEIS data, excluding unknown ethnicity, non-US citizens, and two or more races), 2017.

Academic Area	Total Enrollment	American Indian or Alaskan Native	Asian	Black, non-Hispanic	Hispanic	Native Hawaiian or other Pacific Islander	Unspecified Minority	White, non-Hispanic	Total Minority	Total Minority %
<b>Natural Resources Conservation &amp; Management</b>	5427	42	339	126	507	177	61	4175	1252	<b>23.1</b>
<b>Environmental Science and Studies</b>	5679	37	435	140	672	7	5	4383	1296	22.8
<b>Wood Science/Products</b>	558	5	49	14	33	0	0	457	101	18.1
<b>Range Science and Management</b>	328	9	4	0	33	0	0	282	46	14.0
<b>Watershed Science and Management</b>	407	20	11	4	18	0	2	352	55	13.5
<b>Fisheries and Wildlife</b>	7158	98	112	112	618	10	10	6198	960	13.4
<b>Natural Resources Recreation</b>	2025	7	34	74	112	5	3	1790	235	11.6
<b>Forestry</b>	3888	68	36	36	280	7	3	3458	430	<b>11.1</b>
<b>Total Enrollment in 2017</b>	<b>25470</b>	<b>286 (1.1)</b>	<b>1020 (4.0)</b>	<b>506 (1.9)</b>	<b>2273 (8.9)</b>	<b>206 (0.8)</b>	<b>84 (0.3)</b>	<b>21095 (82.8)</b>	<b>4375</b>	<b>17.2</b>

Undergraduate enrollment in NR programs at NAUFRP institutions (FAIES data, n=61) by race/ethnicity and gender, 2017 (excluding unknown gender, unknown ethnicity).

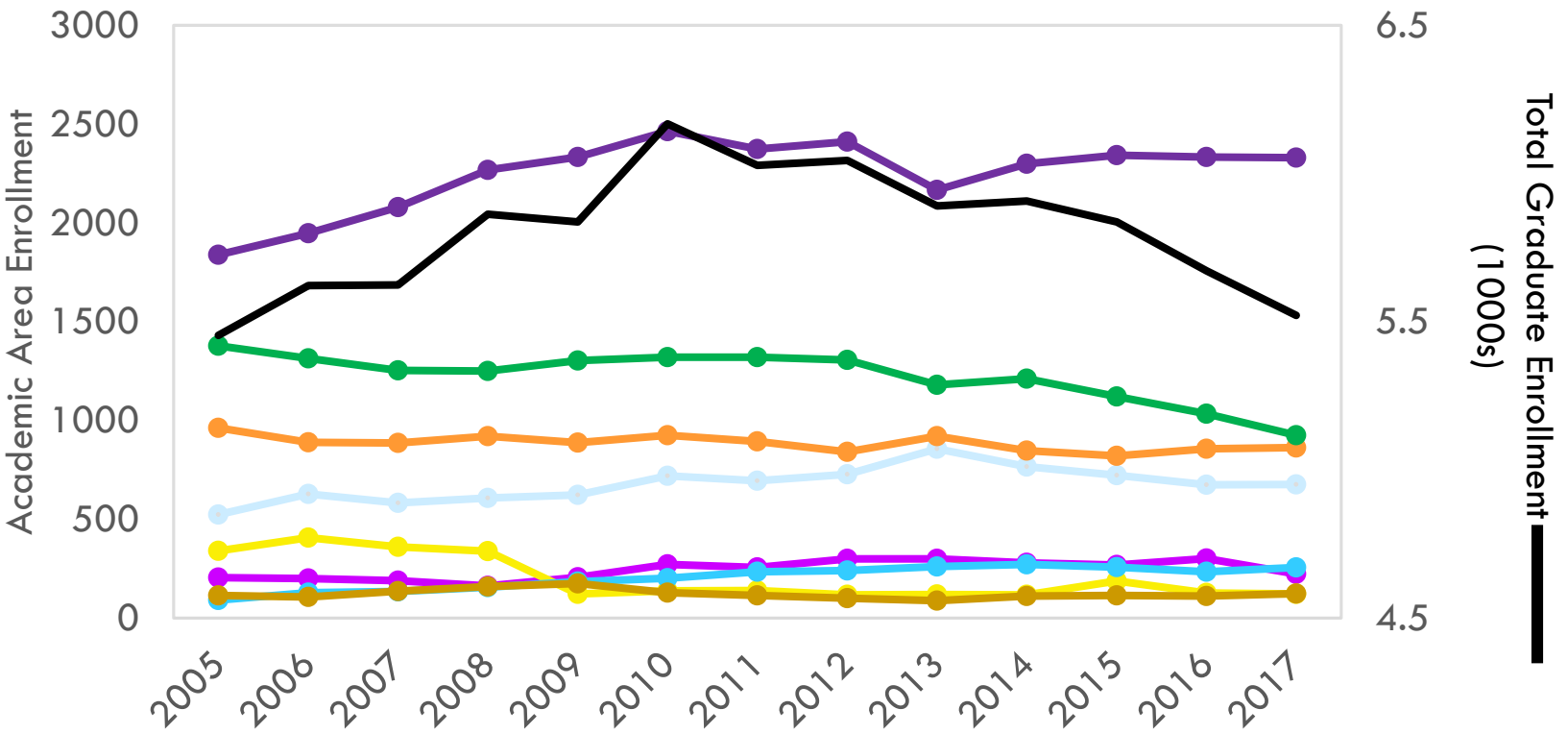
Race/ Ethnicity	Female	Male	Total	% Female
Asian	620	399	1020	60.8
Unspecified Minority	48	36	84	57.1
Hispanic	1297	975	2273	57.1
Native Hawaiian or Pacific Islander	116	90	206	56.3
ALL Non-US Citizens	314	254	568	55.3
Two or More Races	553	464	1019	54.3
Black, non-Hispanic	249	257	506	49.2
White, non-Hispanic	9260	11816	21095	43.9
American Indian or Alaskan Native	122	164	286	42.7
Grand Total	12579	14455	27057	46.5

# Graduate Enrollment



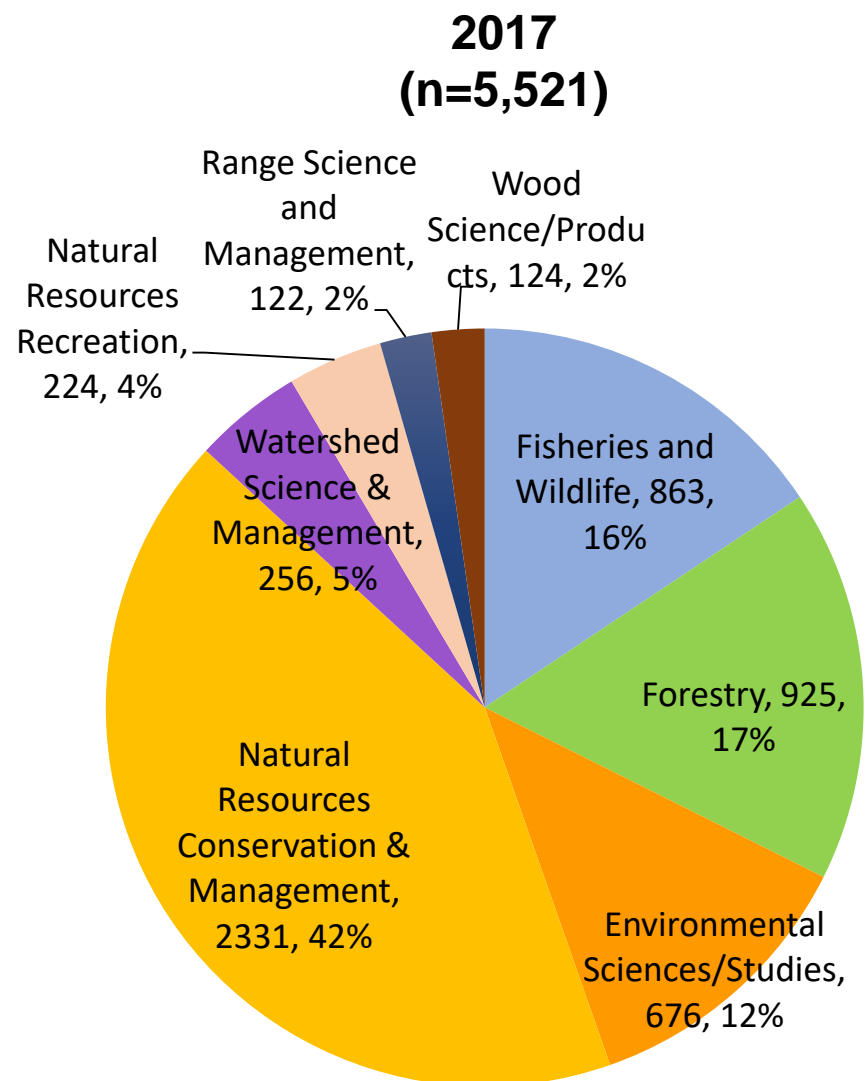
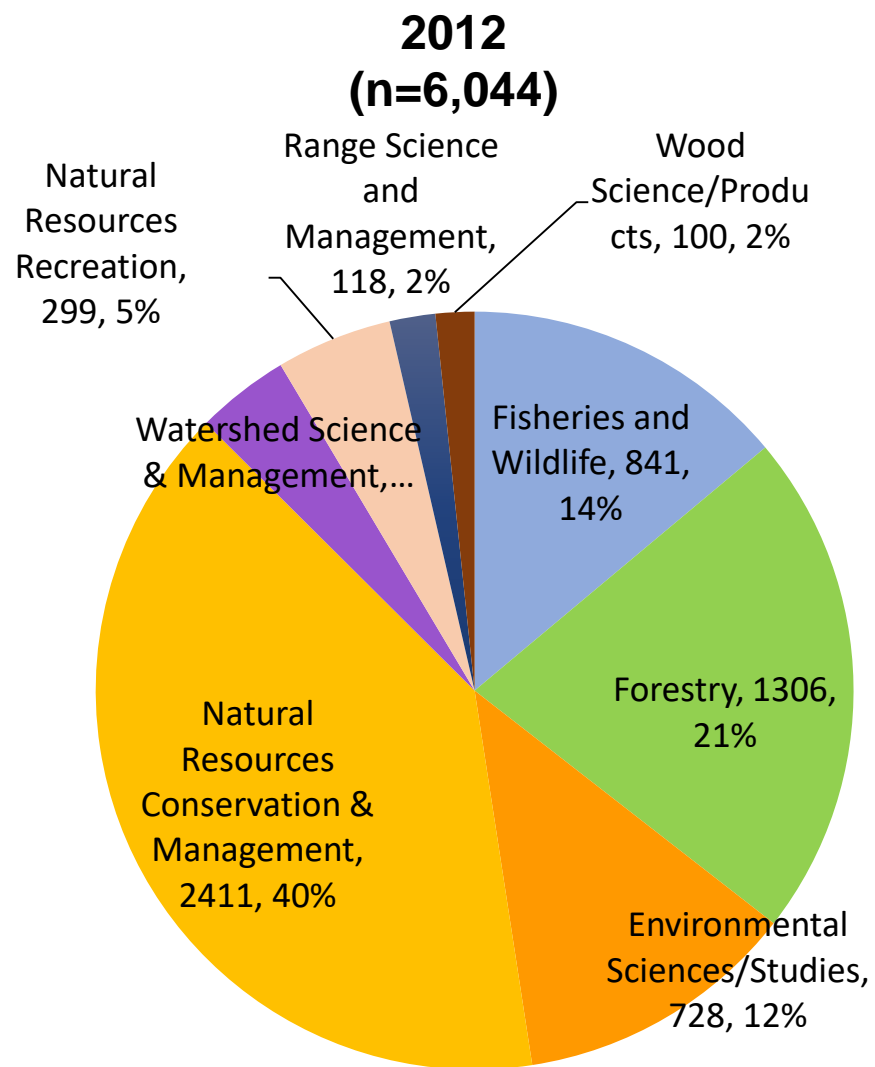


# Graduate NR enrollment by academic area at 54 NAUFRP institutions, 2005–2017 (FAEIS October 1, 2019).



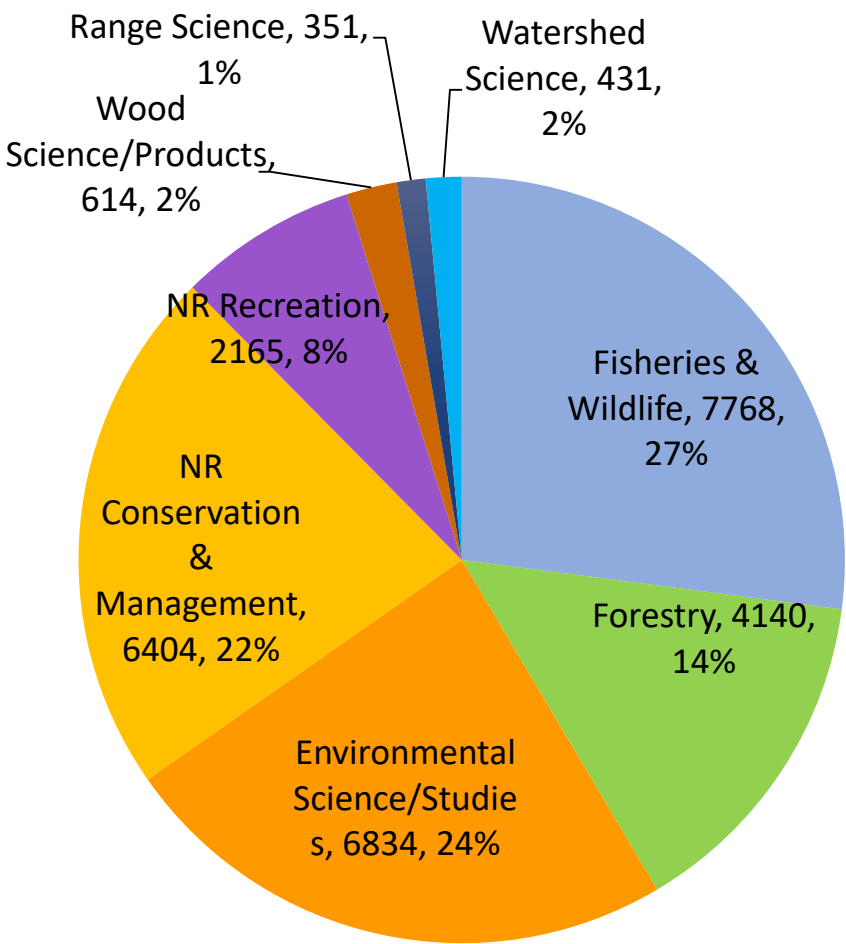
- Environmental Science and Studies
- Forestry
- Natural Resources Recreation
- Watershed Science & Management
- Fisheries and Wildlife
- Natural Resources Conservation & Management
- Range Science and Management
- Wood Science/Products

# Proportion of NR graduates enrolled in various academic areas at 54 NAUFRP institutions, 2012 & 2017 (FAEIS database, October 1, 2019).

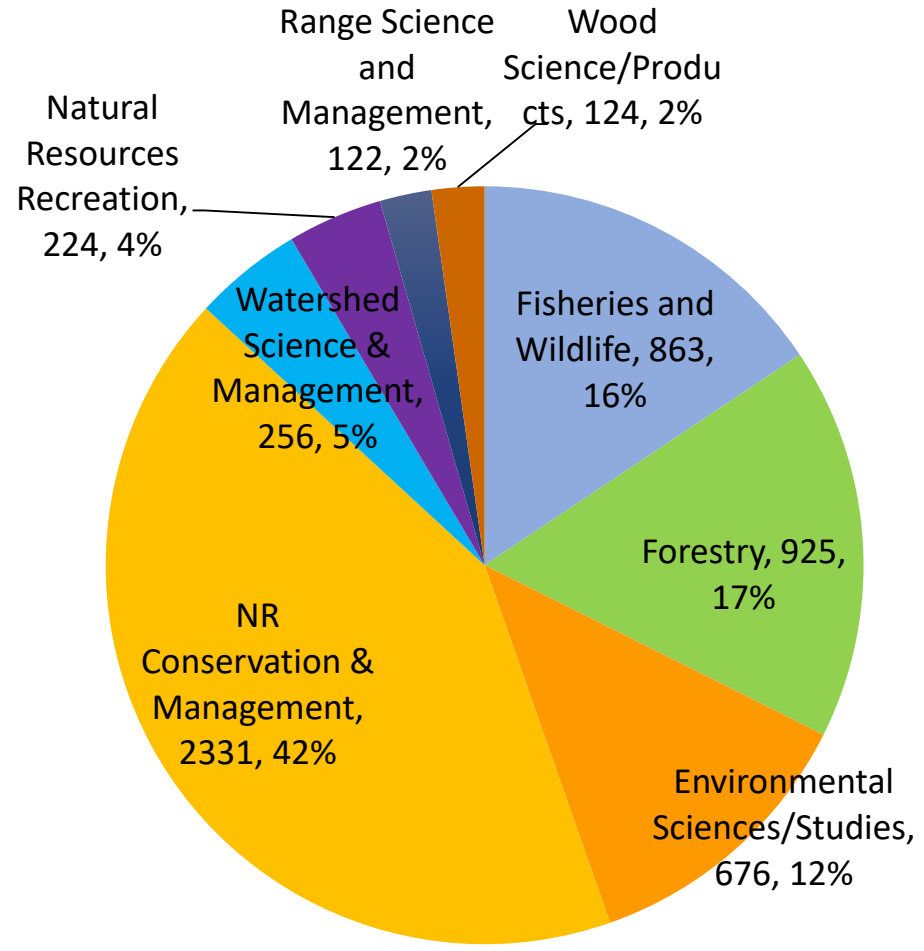


**Comparison of the proportion of NR undergraduates and graduates enrolled in various academic areas at 61 NAUFRP institutions (7 d not have graduate programs), 2017 (FAEIS database, October 1, 2019).**

**Undergraduate  
(n=28,707)**



**Graduate  
(n=5,521)**



# Gender



# Graduate NR enrollment by gender for 54 Institutions, (FAEIS data set, complete data), 2005–2017, excluding unknown gender.

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<b>Female</b>	2029	2325	2299	2488	2442	2635	2812	2852	2820	2820	2850	2849	2816
%	<b>44.4</b>	46.8	47.3	47.4	45.6	46.6	47.5	48.1	48.6	47.8	48.9	50.4	<b>51.1</b>
<b>Male</b>	2536	2641	2564	2760	2919	3015	3107	3083	2982	3083	2984	2805	2699
%	55.6	53.2	52.7	52.6	54.4	53.4	52.5	51.9	51.4	52.2	51.1	49.6	48.9
<b>Total</b>	4565	4966	4863	5248	5361	5650	5919	5935	5802	5903	5834	5654	5515

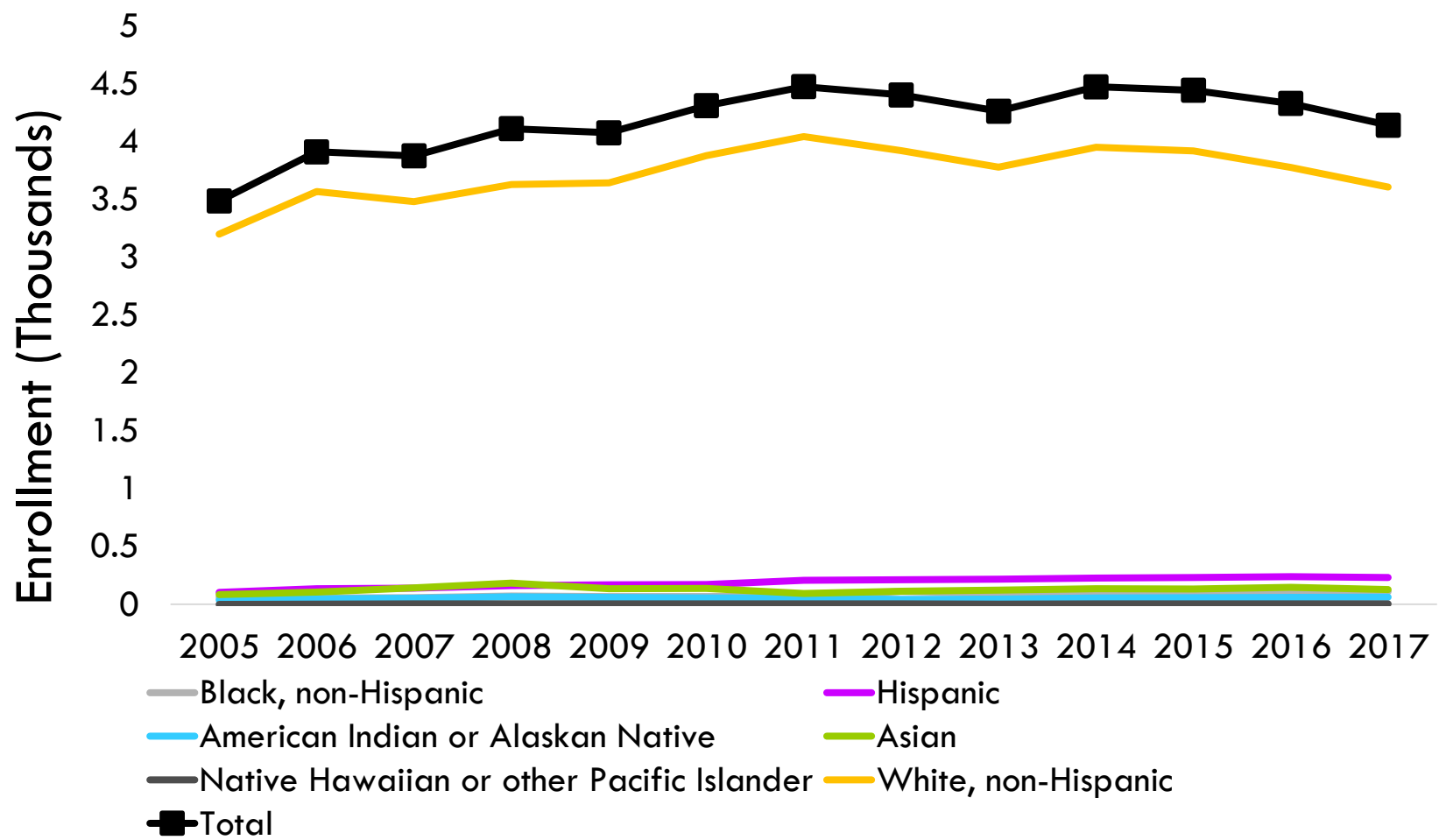
# Graduate enrollment in NR programs at 54 NAUFRP institutions (with completed data) by academic area and gender, 2012 & 2017, excluding unknown gender.

Areas	2012		2017	
	Female	Male	% Female	% Female
<b>Environmental Science and Studies</b>	386	341	53.1	<b>57.7</b>
Range Science and Management	65	53	55.1	56.2
Natural Resources Conservation and Management	1196	1117	51.7	53.6
Natural Resources Recreation	153	146	51.2	52.2
Fisheries and Wildlife	402	439	47.8	52.0
Watershed Science and Management	114	127	47.3	50.0
Wood Science/Products	31	69	31.0	42.7
<b>Forestry</b>	505	791	39.0	<b>39.3</b>
<b>Total</b>	<b>2,852</b>	<b>3,083</b>	<b>48.1</b>	<b>51.1</b>

# Race / Ethnicity

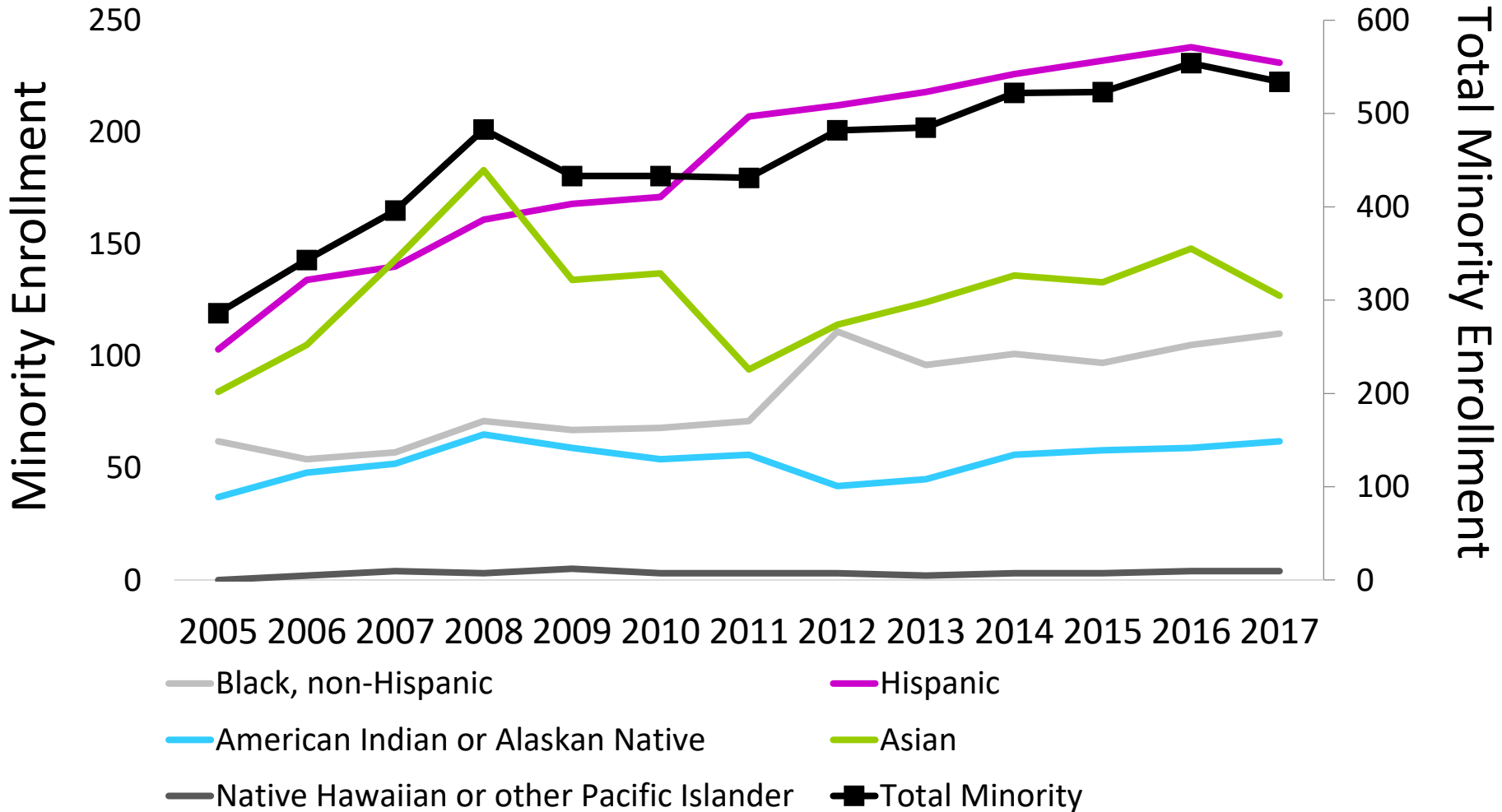


# Total graduate enrollment in NR programs by race/ethnicity from 54 NAUFRP Institutions, FAIES dataset, 2005–2017 (excluding non-US citizens, two or more races, unknown and unspecified).





# Total minority graduate enrollment in NR programs by race/ethnicity from 54 NAUFRP Institutions, FAIES dataset, 2005–2017 (excluding white, non-US citizens, two or more races, unknown and unspecified).



**Absolute and percent graduate enrollment in NR programs by race/ethnicity from FAIES dataset with complete data for all years (n=54 institutions), 2005–2017 (excluding non-US citizens, unknown ethnicity, and two or more races).**

<b>Race</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
White, non-Hispanic	3200 (90.6)	3568 (90.4)	3480 (89.1)	3628 (87.0)	3643 (88.1)	3877 (88.4)	4043 (88.9)	3921 (88.2)	3778 (87.7)	3951 (88.0)	3920 (87.9)	3775 (86.9)	3607 (86.7)
Hispanic	103 (2.9)	134 (3.4)	140 (3.6)	161 (3.9)	168 (4.1)	171 (3.9)	207 (4.6)	212 (4.8)	218 (5.1)	226 (5.0)	232 (5.2)	238 (5.5)	231 (5.6)
Asian	84 (2.4)	105 (2.7)	143 (3.7)	183 (4.4)	134 (3.2)	137 (3.1)	94 (2.1)	114 (2.6)	124 (2.9)	136 (3.0)	133 (3.0)	148 (3.4)	127 (3.1)
Black, non-Hispanic	62 (1.8)	54 (1.4)	57 (1.5)	71 (1.7)	67 (1.6)	68 (1.6)	71 (1.6)	111 (2.5)	96 (2.2)	101 (2.2)	97 (2.2)	105 (2.4)	110 (2.6)
American Indian or Alaskan Native	37 (1.0)	48 (1.2)	52 (1.3)	65 (1.6)	59 (1.4)	54 (1.2)	56 (1.2)	42 (0.9)	45 (1.0)	56 (1.2)	58 (1.3)	59 (1.4)	62 (1.5)
Unspecified Minority	47 (1.3)	36 (0.9)	31 (0.8)	57 (1.4)	60 (1.5)	76 (1.7)	73 (1.6)	44 (1.0)	47 (1.1)	17 (0.4)	15 (0.3)	14 (0.3)	21 (0.5)
Native Hawaiian or other Pacific Islander	0 (0.0)	2 (0.1)	4 (0.1)	3 (0.1)	5 (0.1)	3 (0.1)	3 (0.1)	3 (0.1)	2 (0.1)	3 (0.1)	3 (0.1)	4 (0.1)	4 (0.1)
<b>Total</b>	<b>3533</b>	<b>3947</b>	<b>3907</b>	<b>4168</b>	<b>4136</b>	<b>4386</b>	<b>4547</b>	<b>4447</b>	<b>4310</b>	<b>4490</b>	<b>4458</b>	<b>4343</b>	<b>4162</b>
<b>Total Minority</b>	<b>333 (9.4)</b>	<b>379 (9.6)</b>	<b>427 (10.9)</b>	<b>540 (13.0)</b>	<b>493 (11.9)</b>	<b>509 (11.6)</b>	<b>504 (11.1)</b>	<b>526 (11.8)</b>	<b>532 (12.3)</b>	<b>539 (12.0)</b>	<b>538 (12.1)</b>	<b>568 (13.1)</b>	<b>555 (13.3)</b>

# **Graduate NR enrollment by academic area and race/ethnicity at 54 NAUFRP institutions (FAEIS, excluding unknown ethnicity, non-US citizens, and two or more races), 2017.**

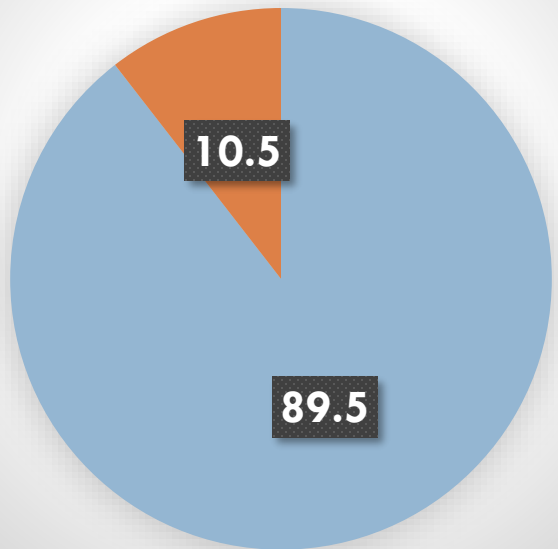
Academic Area	Total Enrollment	American Indian or Alaskan Native	Asian	Black, non-Hispanic	Hispanic	Native Hawaiian or other Pacific Islander	Unspecified Minority	White, non-Hispanic	Total Minority	Total Minority %
<b>Range Science and Management</b>	87	2	3	0	17	0	1	64	23	<b>26.4</b>
Natural Resources Recreation	164	2	5	18	17	0	0	122	42	<b>25.6</b>
Wood Science/Products	53	2	4	0	3	0	0	44	9	<b>17.0</b>
Environmental Science and Studies	527	8	23	21	27	0	8	440	87	<b>16.5</b>
Natural Resources Conservation and Management	1695	22	54	49	98	2	5	1465	230	<b>13.6</b>
<b>Forestry</b>	690	16	19	15	27	0	2	611	79	<b>11.4</b>
Fisheries and Wildlife	747	7	15	5	38	1	4	677	70	<b>9.4</b>
<b>Watershed Science and Management</b>	199	3	4	2	4	1	1	184	15	<b>7.5</b>
<b>Grand Total</b>	4162	62	127	110	231	4	21	3607	555	<b>13.3</b>

Graduate enrollment in NR programs at NAUFRP institutions (FAIES data, n=54) by race/ethnicity and gender, 2017 (excluding unknown gender, unknown ethnicity).

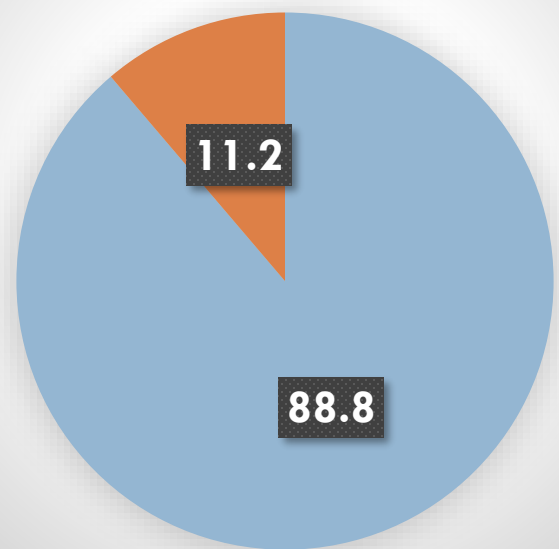
Race/Ethnicity	Female	Male	Total	% Female
<b>Asian</b>	76	51	127	<b>59.8</b>
Hispanic	132	99	231	57.1
Black, non-Hispanic	61	48	109	56.0
American Indian or Alaskan Native	34	28	62	54.8
<b>White, non-Hispanic</b>	1872	1731	3603	<b>52.0</b>
Two or More Races	66	73	139	47.5
ALL Non-US Citizens	369	459	828	44.6
Unspecified Minority	8	13	21	38.1
<b>Native Hawaiian or Pacific Islander</b>	1	3	4	<b>25.0</b>
<b>Grand Total</b>	<b>2619</b>	<b>2505</b>	<b>5124</b>	<b>51.1</b>

# Society of American Foresters, 2017 and 2019 gender of reporting members.

**2017 SAF Members Gender**  
6,383/11, 874 (53%) reporting



**2019 SAF Members Gender**  
8,377/ 10,850 (77%) reporting

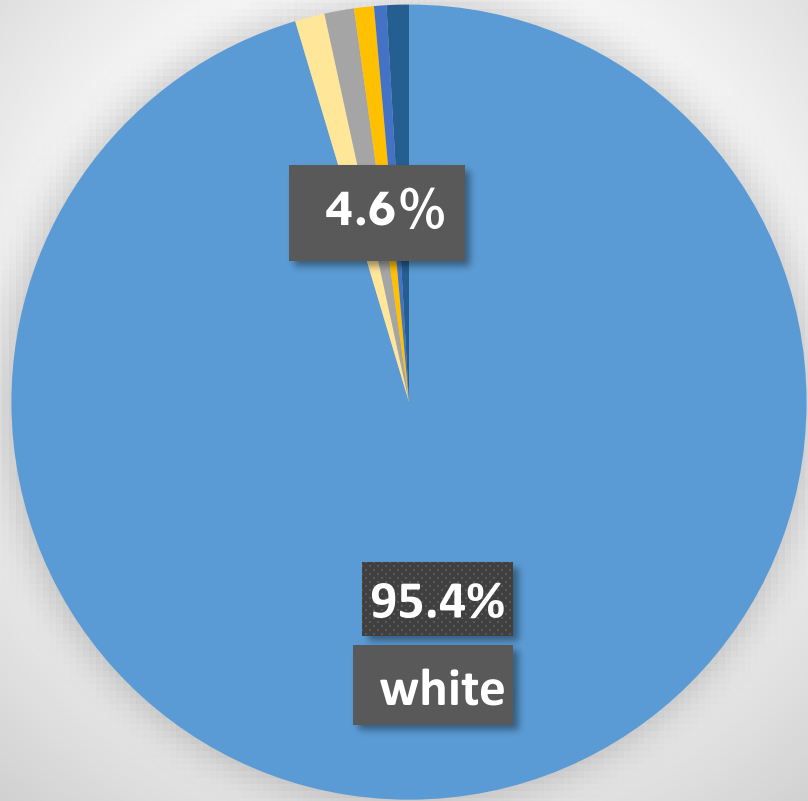


■ Men

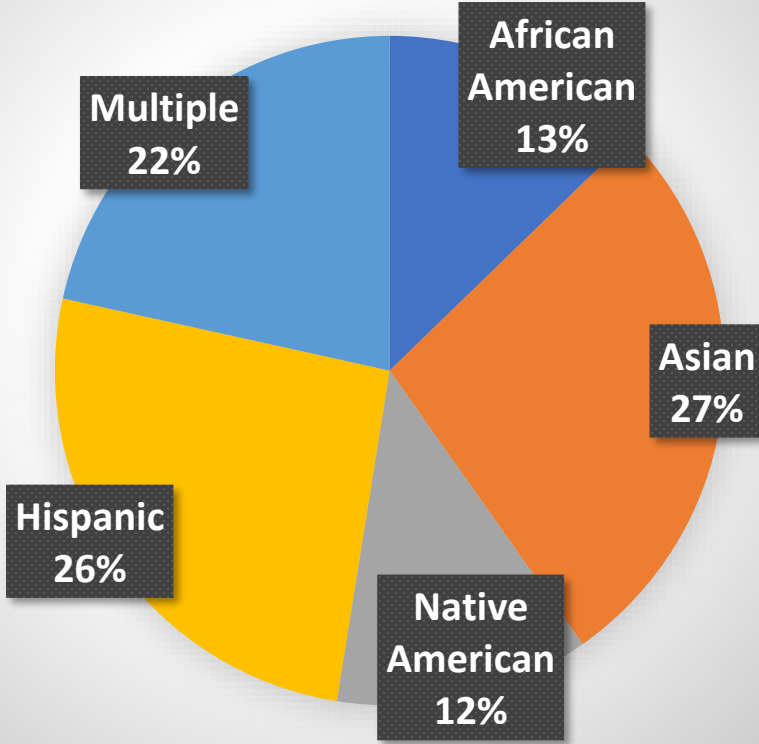
■ Women

# Society of American Foresters, 2017 and 2019 race/ethnicity of reporting members.

2017-2019 SAF Members Ethnicity  
No change in percentage



2019 SAF Ethnic Minority Demographics



# Summary and Conclusions-I

- NR **undergraduate enrollment** increased by two-thirds between 2005 and 2017, or at about 5.5% per year.
- The fastest growing undergraduate academic areas in NR since 2005 have been Fisheries and Wildlife, NR Conservation and Management, and Environmental Science and Studies, which now collectively make up nearly three-quarters of all NR enrollment.
- Percent female undergraduate enrollment has been increasing steadily since 2005 and now constitutes about 47% of total enrollment. Most of this increase has occurred in the overall fastest growing academic areas noted above, with Forestry having the lowest percent females among all NR disciplines at 23%.

# Summary and Conclusions-II

- Minority undergraduate enrollment has been increasing more rapidly than Non-Hispanic Caucasian enrollment since 2005, and now constitutes about 16% of all NR enrollment.
- The greatest increases in undergraduate minority enrollment have been with Hispanics, followed by Asians.
- When adjusted for the number of 18-to 24-year-olds in the population, Native Americans have the highest undergraduate enrollment, followed by Asians.



# Summary and Conclusions--III

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- The interdisciplinary areas of NR Management and Conservation and Environmental Science and Studies have the highest percent undergraduate minority enrollment.
- Most minority groups have a higher percent undergraduate female enrollment than do non-Hispanic Caucasians.
- While these gains are notable, the percent undergraduate minority enrollment in NR remains among the lowest of all areas of study in higher education.

# Summary and Conclusions-IV

- NR **graduate enrollments** have been decreasing since about 2010.
- NR Conservation and Management is the largest and fastest growing NR discipline at the graduate level.
- Women now make up over half the graduate enrollment in NR, with Environmental Science and Studies being the highest among the NR disciplines.
- While the percent females in forestry (39%) is lower than in all other NR disciplines at the graduate level, it is significantly higher than at the undergraduate level.

# Summary and Conclusions-V

- While NR graduate minority enrollment is more than 1.6 times higher than in 2005, at 13% it remains less than the percent undergraduate minority enrollment.
- As with undergraduates, Hispanics make up the highest percent of minorities at the graduate level, followed by Asians.
- Among disciplines, Range Science and Management has the highest percent minorities at the graduate level, with most being Hispanics, followed by NR Recreation with a predominance of African Americans and Hispanics.

# Summary and Conclusions--VI

- Most minority groups have a higher percent graduate female enrollment than do non-Hispanic Caucasians.
- SAF, with 11% females and 5% minorities, is slightly lower than these percentages for Forestry graduates currently in the workforce, and substantially lower than for students currently enrolled in Forestry programs.
- Based on the pool of women and minorities currently enrolled in Forestry and related NR degree programs, SAF has the potential to increase the diversity of its membership substantially.



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