

Geoscientists-in-the-Parks FY 2010 - Accomplishments Report

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The Geoscientist-in-the-Parks (GIP) program placed fifty-nine (59) participants throughout the NPS in fiscal year 2010. GIPs worked in all 7 NPS Regions, 2 I&M Networks, and the Washington Office to assist parks in meeting their unmet geoscience needs. Forty-eight (48) of the positions were 3 month GIP positions and eleven (11) were longer term (4 month – 1 year) Guest Scientist positions. These GIPs completed work valued at \$1.45 million for a cost of only \$292,000 to the NPS, a noteworthy payback of 5:1 for NPS. The GIP Program has grown 37% over the past 2 years, from 43 positions in 2008 to 59 positions in 2010, reflecting the high value parks perceive from these geoscience positions. A summary of the positions, disciplines covered, educational experience, ethnicity of the interns, FY 2010 expenditures, and program partners are shown below in Tables 1 – 7.

Highlights of the GIP program in 2010 include:

- NPS received geoscience project work valued at over \$1.45 million, at an NPS cost of \$292,307. This represents a 5:1 payback for NPS funds expended.
- External program partners contributed 25% of the program costs (over \$99,000) to support GIP positions in NPS units.
- GIPs were placed in all NPS regions, two inventory and monitoring networks, and the Washington office, with half of the positions located in parks in the Intermountain and Pacific West Regions.
- The GIP volunteers represented a wide variety of geologic disciplines, ranging from caves/karst to paleontology to volcanology specialists.
- Project categories were equally split among inventory and monitoring, research, and interpretation / education projects.
- NPS initiated a diversity component to the program to increase participation by under-represented groups. This year, two Native Americans were placed in NPS units through the American Indian Higher Education Consortium.
- NPS negotiated with the American Association for Women Geoscientists to sponsor three positions annually through the NPS partnership with GSA's GeoCorps America Program. This assimilation of a pre-existing partnership has increased the program efficiency and provides quality administrative and recruiting services by the GSA.
- The GIP Intranet and Internet sites were enhanced with updated information on how to obtain a GIP, a searchable database to find parks that have previously had GIPs, and links to all available GIP products (reports, videos, trail guides etc.).
- Database enhancements include live on-line access to GSA's program information as well as an updated Access database to track all program and funding information.

The lack of sustained program funding remains a key challenge for the program, which currently operates on a variety of annual funding sources. Long-term success and viability for the GIP program requires NPS base budget or sustainable external program funding.

Summary Tables for FY 2010 Geoscientists-in-the-Parks Program

Table 1: GIP positions by park and region in FY 2010.

Region	# Positions	Parks
Alaska	3	DENA (3),
Intermountain	18	BEOL/SACR/CAVO, BITH (2), BRCA (2), DINO (3), FLFO (3), GLAC, GLCA, GRCA, GRTE, ROMO, YELL (2)
Midwest	4	BADL, LECL (2), VOYA
National Capital	4	CATO, CEU, HAFE, PRWI
Northeast	1	CACO
Pacific West	12	CRMO (2), JODA (2), MORA (5), ORCA (2), SEKI (2), YOSE
Southeast	5	COSW, GUIS, MACA (3)
Washington Office	9	Climate Change Response Program, Geologic Resources Division (GRD)
I&M Networks	3	NGPN, NCBN (2)
TOTAL	59	

Table 2: GIP positions by project category in FY 2010.

Project Category	# Projects
Interpretation / Education	18
Inventory and Monitoring	18
Multi-faceted	5
Research	18

Table 3: GIP positions by geologic discipline in FY 2010.

Discipline	# Projects
Cave / Karst	5
Climate Change	1
Coastal	6
Energy and Minerals	2
Fluvial	3
Geologic Hazards	3
General Geology	17
Geomorphology	2
Geothermal	1
Hydrology - Lacustrine	1
Paleontology	16
Volcanology	2

Table 4: GIP positions by education level in FY 2010.

Education	# Positions
Undergraduate student	17
B.S. / B.A. degree	8
Graduate Student	14
M.S. / M.A. degree	8
Not reported	12

Table 5: GIP positions by ethnicity in FY 2010.

Ethnicity	# Positions
Asian	1
Caucasian	40
Native American	2
Not reported	16

GIP Program Funding in Fiscal Year 2010

Table 6: Geoscientists-in-the-Parks Program expenditures in FY 2010.

Funding Source ¹	Amount Expended	
Geologic Resources Division	\$133,283	
Inventory & Monitoring Program (GRI, paleontology inventories)	\$5,500	
NRPP funding	\$23,176	
Youth Internship Program funding	\$17,846	
Parks	\$112,502	
NPS sub-total		\$292,307
Park Associations	\$24,170	
Geological Society of America (in-kind contribution and GSA Foundation)	\$62,600	
Association for Women Geoscientists (AWG)	\$8,250	
National Association of Geoscience Teachers (NAGT)	\$4,000	
Partner sub-total		\$99,020
TOTAL		\$391,327

¹ Expenditures are based on the most current data in the NPS GIP database (as of 10/8/10).

Value of GIP Volunteer Hours

GIP participants are considered volunteers under the NPS' Volunteer in Parks Act (16 USC Sec. 18g). The 59 GIP Program volunteers contributed 32,644 hours of work in fiscal year 2010. Using a conservative estimate of \$20.85/hour for the value of an average volunteer, as determined by the Federal Interagency Team on Volunteerism, GIP participant's work in 2010 is worth \$680,627 which equates to a value per total program dollar spent of approximately 2:1. Using a more appropriate value of \$44.57/hour for geoscientist work from the Bureau of Labor Statistics (<http://www.bls.gov/oes/2009/may/oes192042.htm>), the GIP hours are valued at \$1,454,943 equaling a return of about 4:1 per total dollar spent, including program partner expenditures.

Benefit/Cost to NPS

When assessed in terms of value received for NPS dollars expended, the NPS received almost a 5:1 payback, demonstrating that the GIP program is highly cost-effective for the NPS. Parks received geoscience work valued at over \$1.45 million with a cost to NPS of only \$292,307.

Partnerships

Table 7: Number of GIP Positions by partner organization.

Partner	# Positions
Geological Society of America	54
National Association of Geoscience Teachers	2
Association for Women Geoscientists	3
American Indian Higher Education Consortium	2

Geological Society of America partnership

- NPS partners with GSA's GeoCorps America program (GSA program that places geoscientists in NPS, USFS, and BLM units to assist with their geoscience needs)

- 14 year partnership, core partner to the GIP program
- 5 year Cooperative Agreement executed in 8/08, amended in 2009
- GSA annually contributes a minimum of \$50,000 towards the program
- GSA Foundation annually supports two or more positions, primarily in Alaska
- GSA maintains online system for posting position descriptions and applications, recruits for each position, and provides day-to-day administrative program support

National Association of Geoscience Teachers (NAGT) partnership

- 5 year agreement with NAGT (2006 – 2010)
- Places two Earth Science teachers annually at Mammoth Cave NP to assist their Earth science needs and to build long-term relationships with neighboring schools and communities
- NAGT pays participant's stipend and contributes to participant obtaining Continuing Education Credits
- NAGT is contemplating continuing program at another park in 2011

Association for Women Geoscientists (AWG) partnership

- Contributes funding to GSA GeoCorps America Program to place 3 GIPs in NPS units each year

American Indian Higher Education Consortium

- FY 2010 partnership placed 2 Native American interns in NPS units
- Diversity component of program will be expanded to additional under-represented groups in FY 2011

GIP Program Websites and Databases

- Internet: <http://nature.nps.gov/geology/gip/index.cfm>, site contains program overview, and guidance on obtaining geoscience jobs in the NPS, capability to search for parks that have had a GIP, can download completed GIP products,
- Intranet: <http://inside.nps.gov/waso/waso.cfm?prg=748&lv=4>, site contains program overview and provides guidance to NPS staff on how to obtain GIP assistance,
- Upgraded NPS Access database includes all program information that was previously stored in simplified Access database, Word documents, and Excel spreadsheets. Database includes project and geoscience participant information, funding data, funding status, and a listing of all products completed for each project.
- In FY 2010, NPS staff worked with GSA to upgrade their online application system and program database.

GIP Program Funding

- To-date, no sustained base program funding has been obtained. Program funding continues to be from annual NRPC/NRSS project funds and year-end GRD funds.
- In FY-2010, continued to seek annual program funding (prepared NRPP proposal) and sustained base funding (prepared OFS funding proposal).
- Worked with NPS Partnerships Program (WASO Youth Programs office) and NRPC Partnerships office to secure sustainable program funding.
- The GIP Program Balance available for 2011 is \$388,692, after obligating year-end GRD and NRPC/NRSS funds.