

Appendix 3. Graphs and Tables

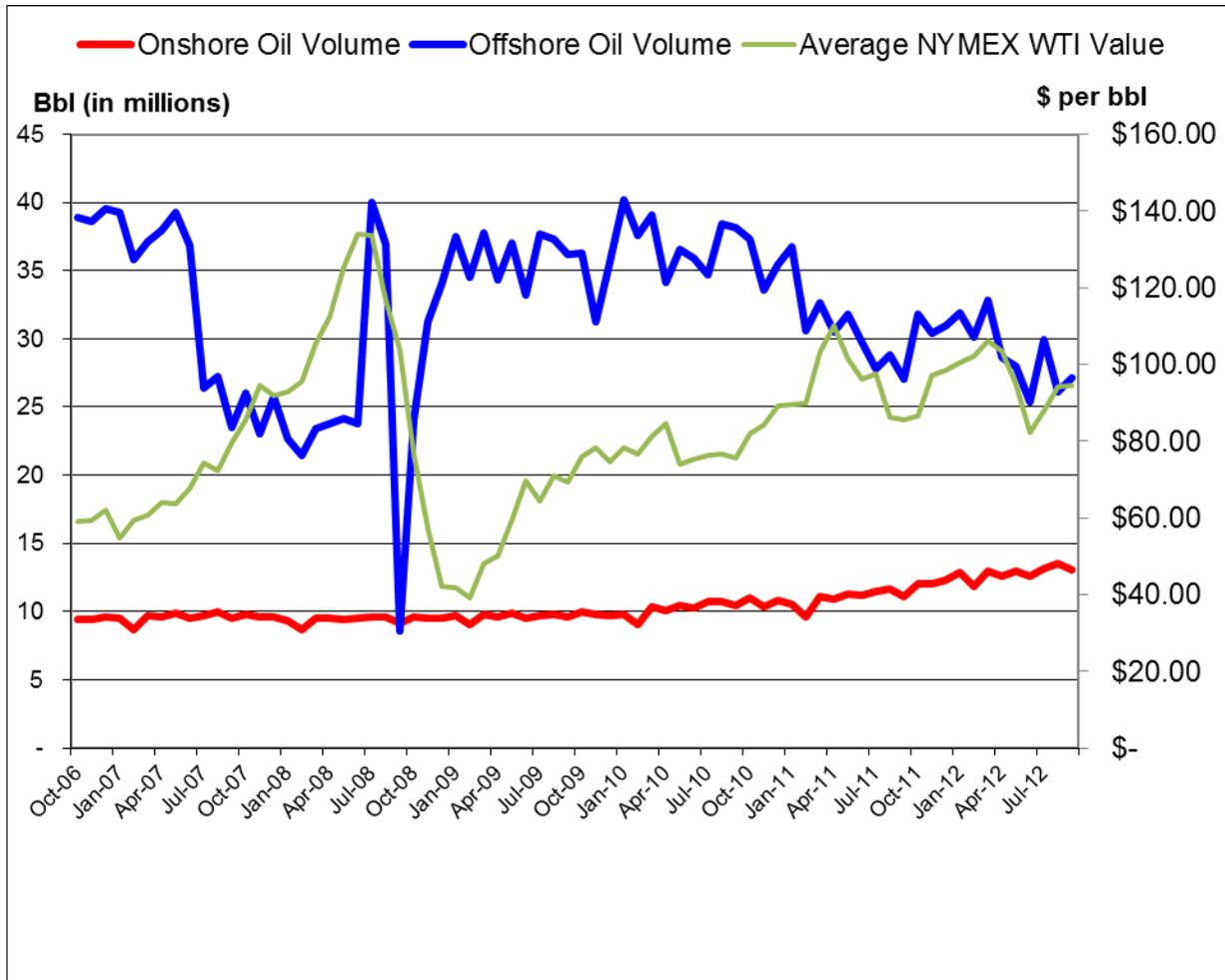


Figure A3-1. Federal Royalty-Bearing Oil Production and Price, FY 2007-FY2012

Source: ONRR data; EIA data.

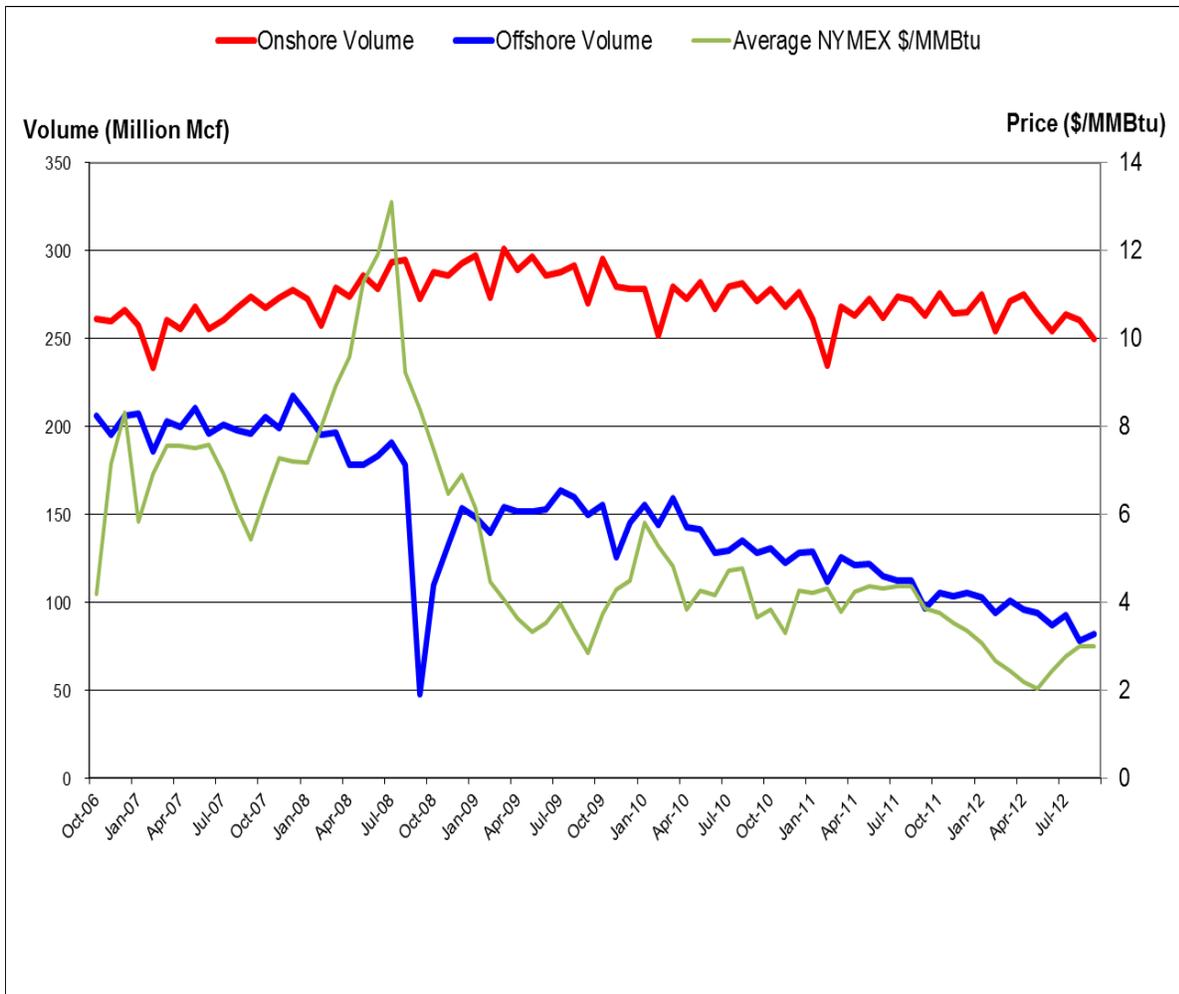


Figure A3-2. Federal Natural Gas Royalty-Bearing Production and Price, 2006-2012

Source: ONRR data; EIA data.

Table A3-1. Oil and Gas Product Prices (2002-2012)

FY	Crude Oil (\$/bbl)	Conventional Gasoline (\$/gal)	No 2 Heating Oil (\$/gal)	Residential Natural Gas (\$/mcf)
2002	23.12	0.66	0.63	8.50
2003	28.22	0.85	0.83	10.16
2004	34.54	1.08	0.98	11.28
2005	51.24	1.49	1.53	12.68
2006	64.45	1.84	1.83	14.93
2007	65.25	1.86	1.83	14.03
2008	105.32	2.71	3.02	15.58
2009	56.50	1.48	1.61	13.61
2010	76.55	1.98	2.03	12.86
2011	105.53	2.64	2.79	12.64
2012	111.48	2.81	3.00	12.23

Source: EIA data.

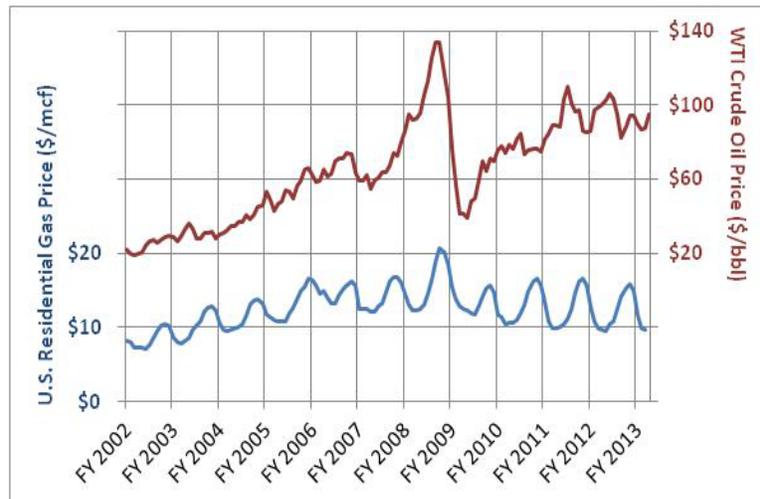


Figure A3-3. U.S. Residential Natural Gas Price, FY 2002 – FY 2012

Source: EIA data.

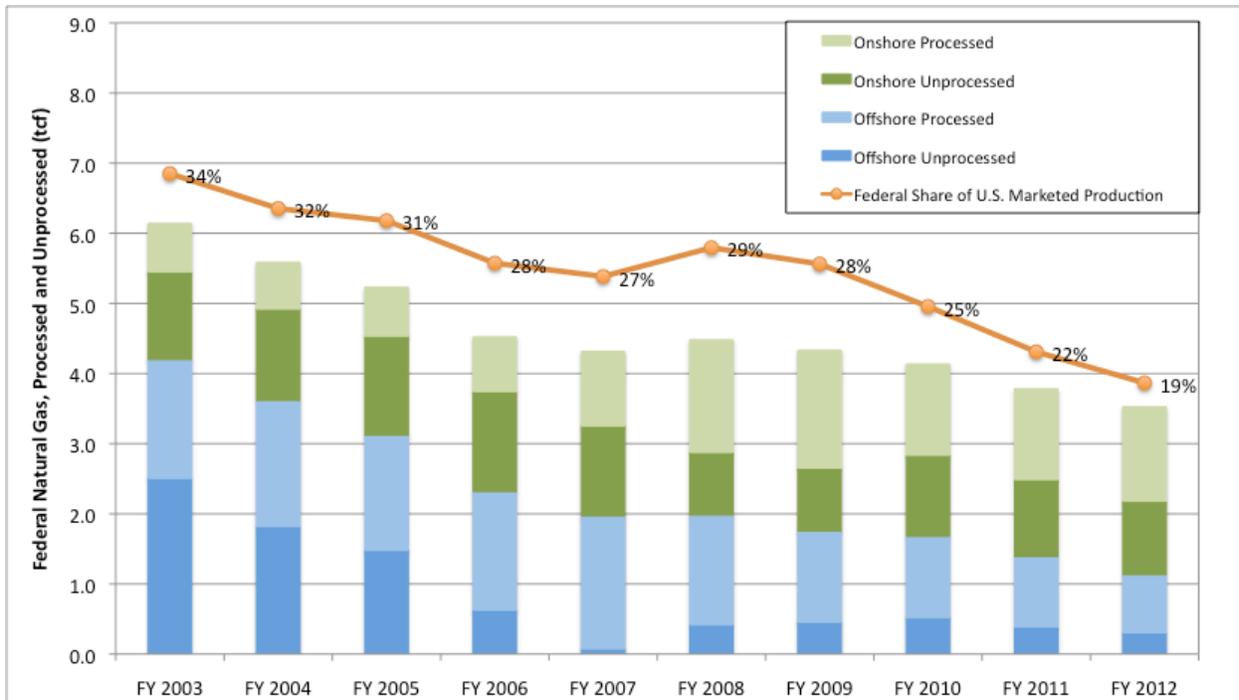


Figure A3-4. Federal Natural Gas Sales Volumes and Share of U.S. Production

Source: ONRR data; EIA data.

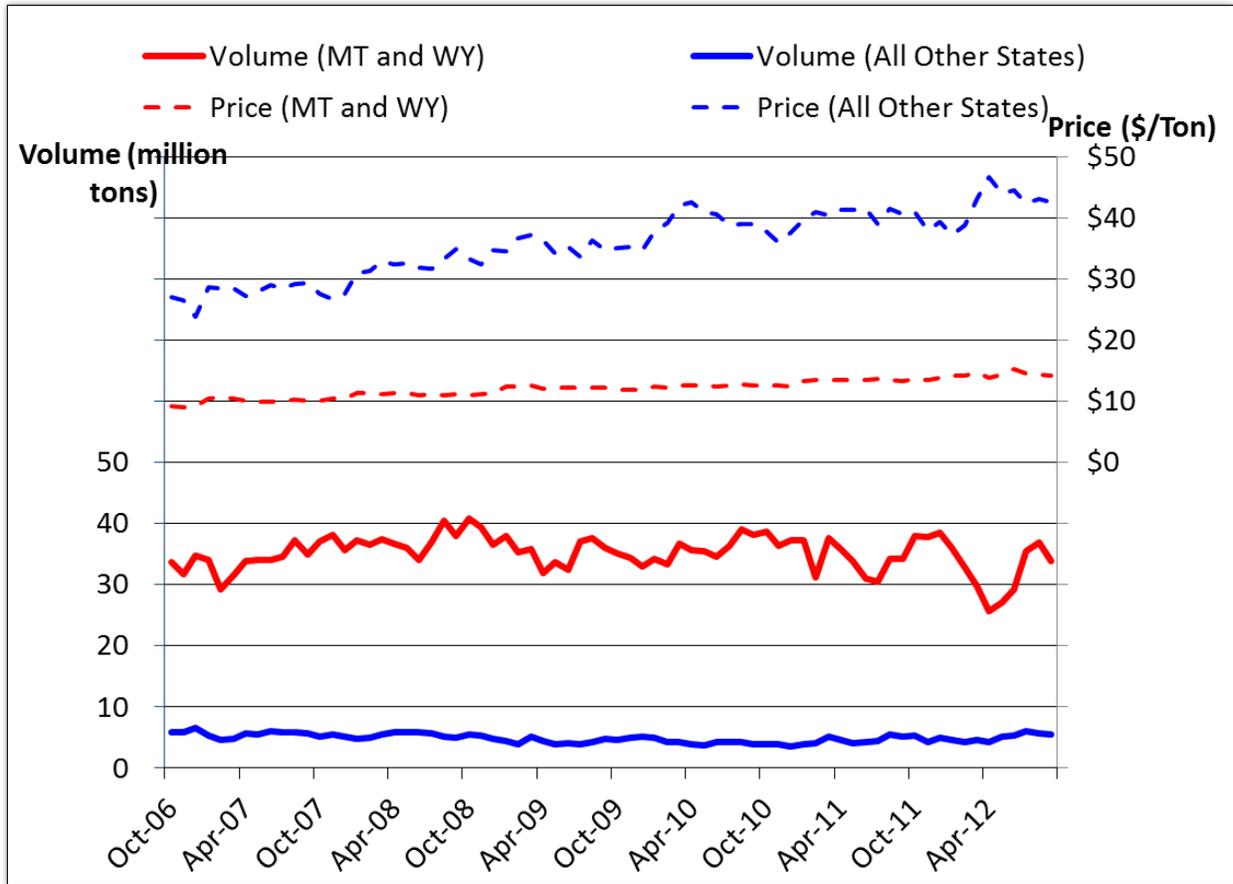


Figure A3-5. Federal Coal Volumes and Prices

Source: ONRR data; EIA data.

Table A3-2. Renewable Projects, Approvals and Capacity

Type of Project	Projects Approved	Capacity (MW)
Geothermal		
To date	46	2,083
Since 2009	9	427
FY 2012	0	0
Solar		
To date	18	5,208
Since 2009	18	5,208
FY 2012 ^a	2	489
Wind		
To date	34	3,034
Since 2009	7	2,359
FY 2012	2	1,815
Hydropower, MW		
Lease of power privilege (2011&2012)	8	38.4
Existing capacity		14,692

Source: BLM data.

^aFY 2012 solar capacity includes a 350 MW project on tribal trust land in NV. Also, not every renewable energy project approved may ultimately be developed.

Table A3-3. Geothermal Leasing by State

State	Number of Parcels	Number of Acres
Nevada	251	724,085
Utah	67	241,490
Oregon	11	41,362
Idaho	13	17,580
California	14	14,110
Colorado	1	799
Total	357	1,039,426

Source: BLM Geothermal Factsheet (January 2013).

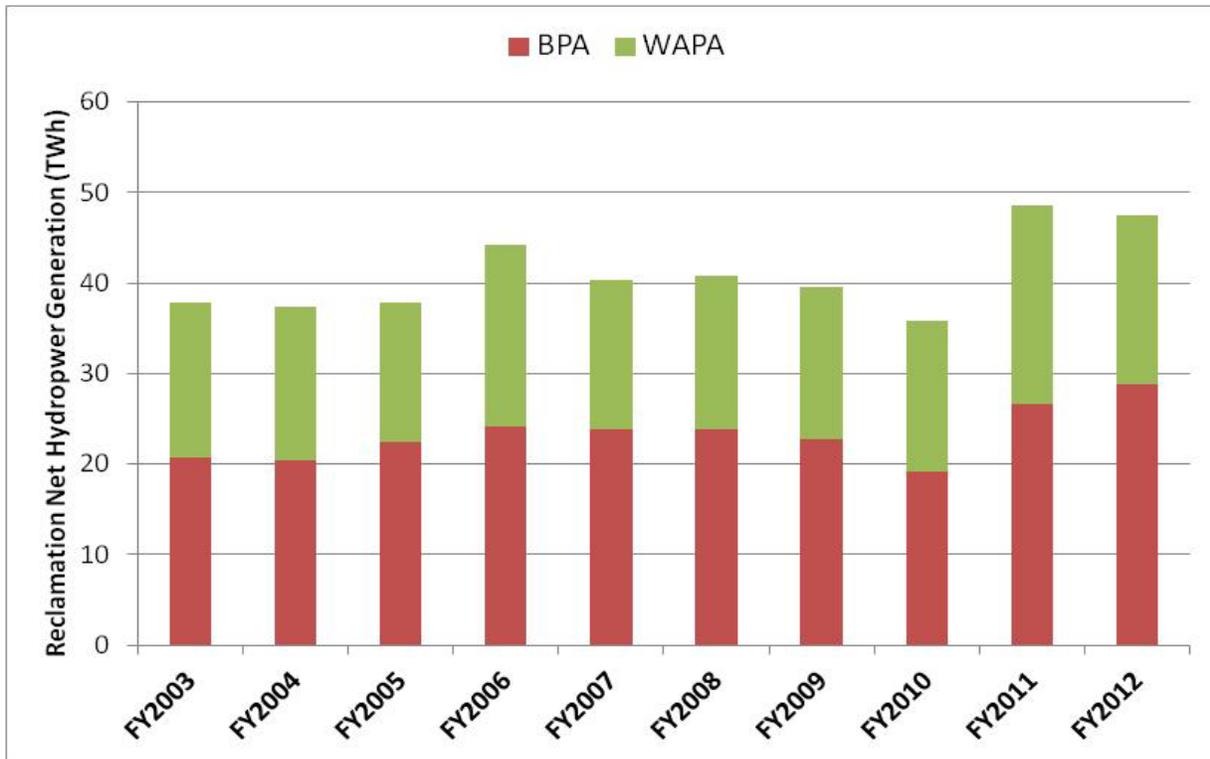


Figure A3-6. Net Generation at Reclamation Operated Hydropower Facilities over FY 2003-FY 2012

Source: Bureau of Reclamation data.

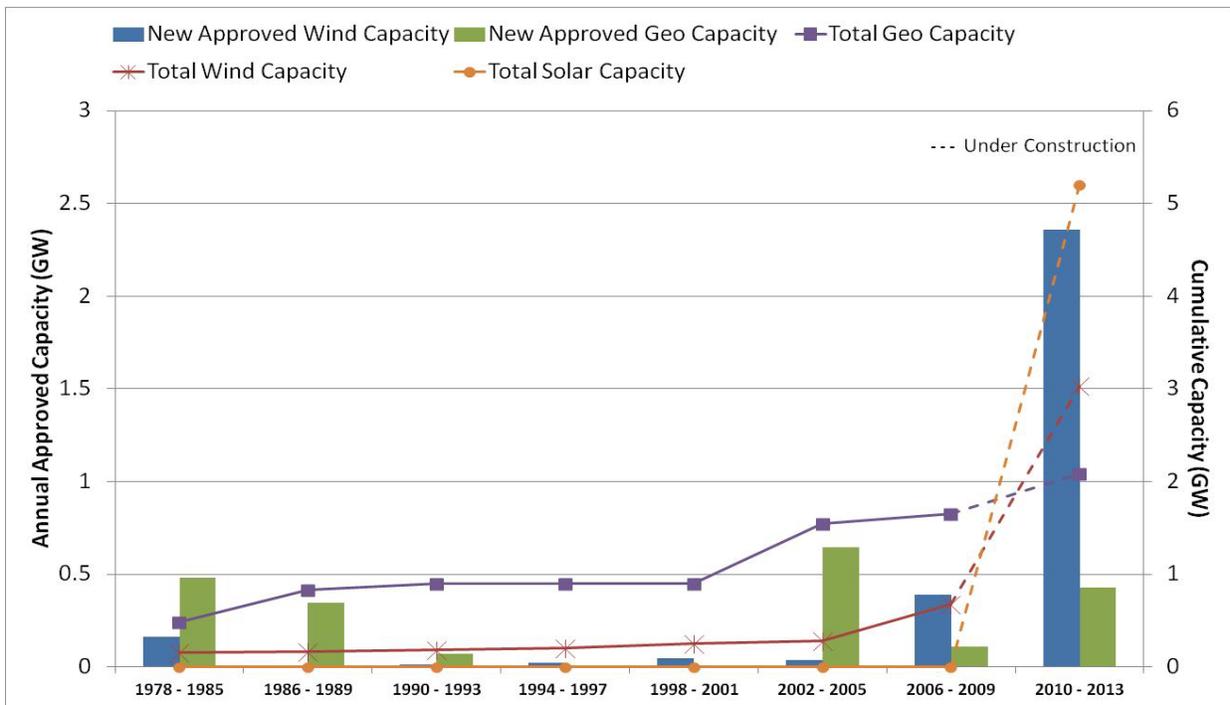


Figure A3-7. Solar, Wind and Geothermal Capacity on Federal Lands (1978-2013)

Source: BLM data.

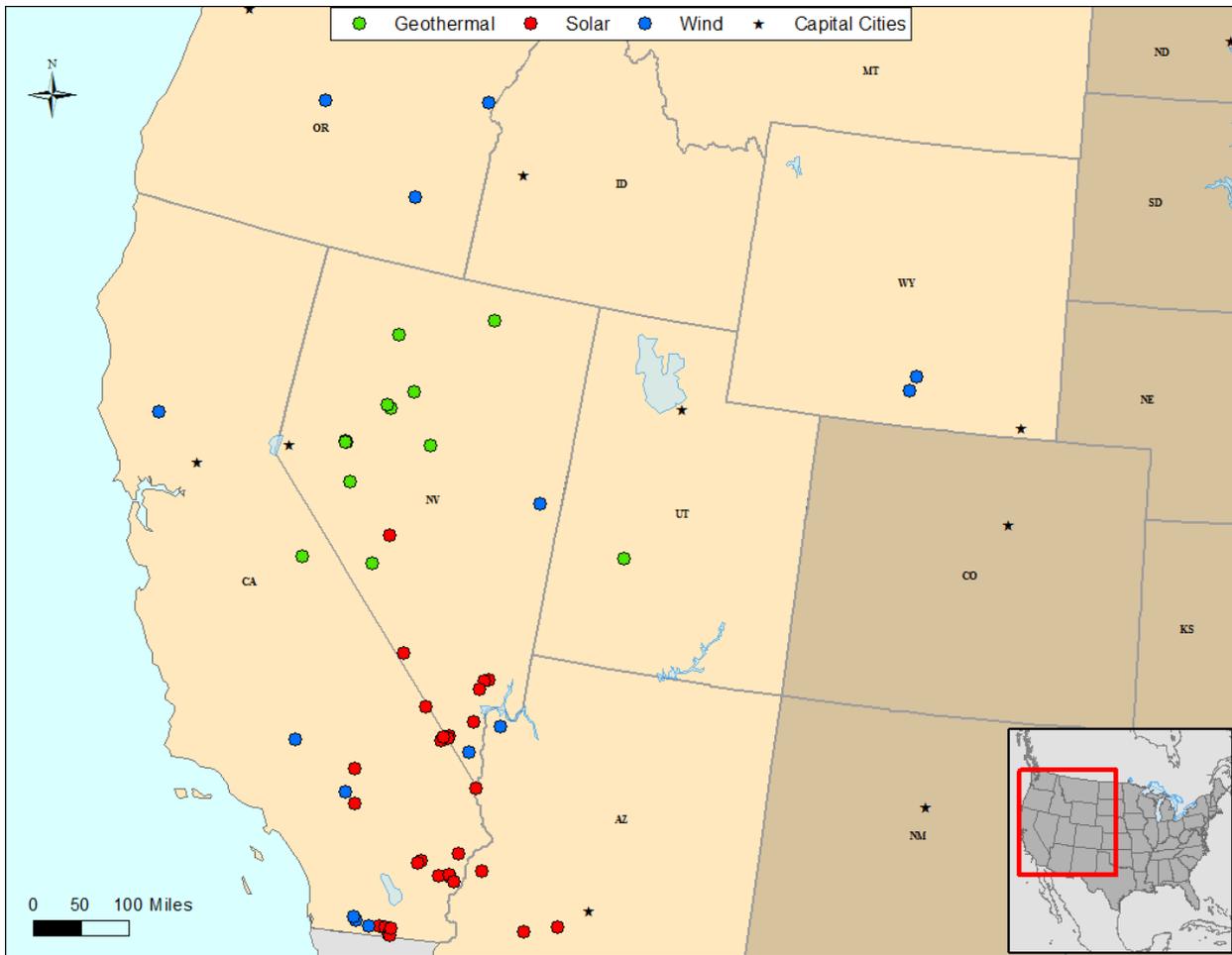


Figure A3-8. Solar, Wind, and Geothermal Energy Projects Approved Since 2009

Source: BLM data.

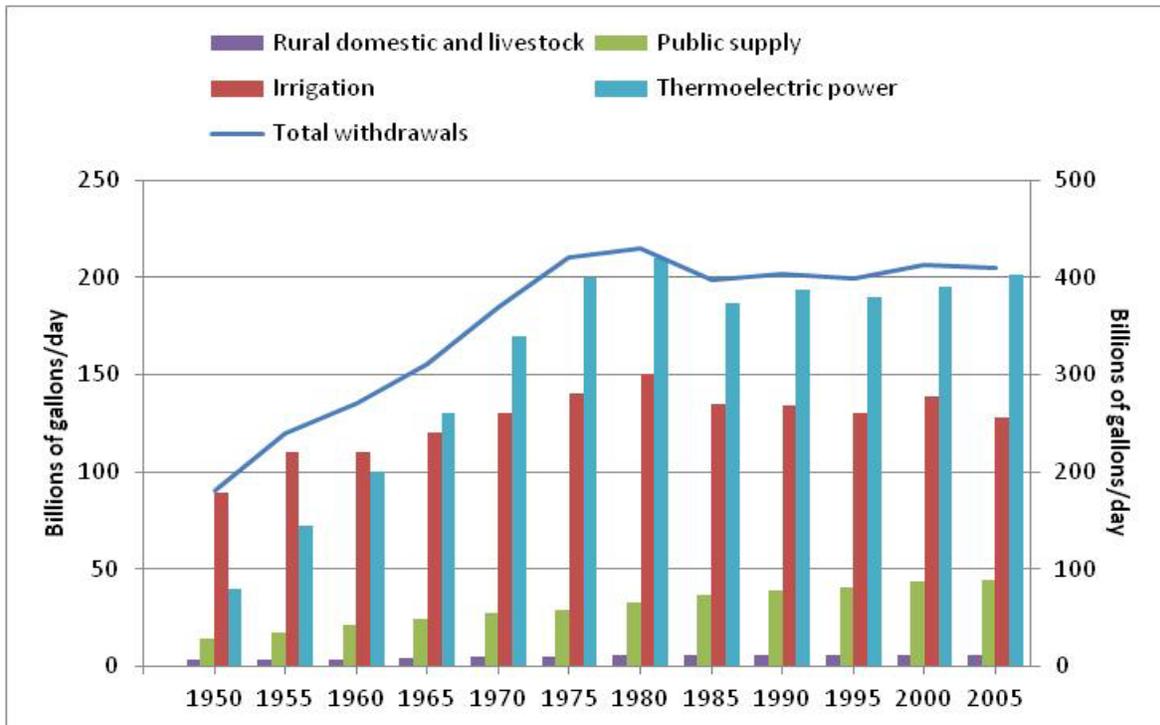


Figure A3-9. Water Withdrawals, 1950-2005

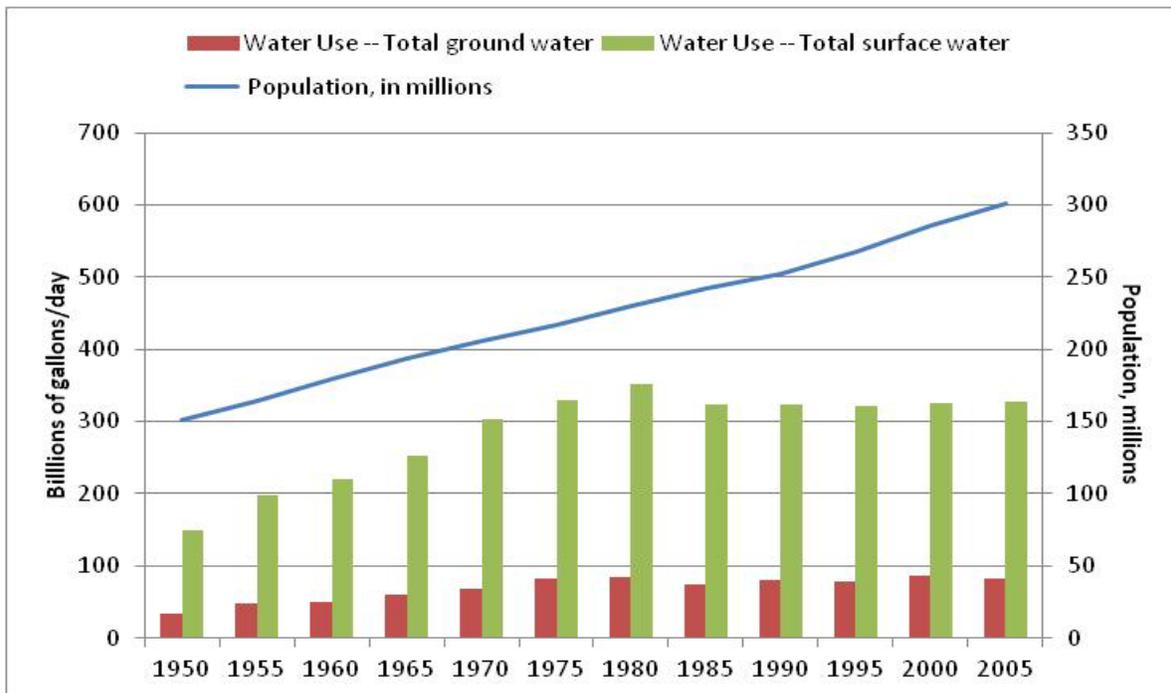


Figure A3-10. Population, Surface and Groundwater Use

Source for both figures: Table 14, Trends in estimated water use in the U.S., 1950-2005. Estimated Use of Water in the United States, Circular 1344, U.S. Department of the Interior, U.S. Geological Survey, 2009.

Table A3-4. Water Deliveries – Economic Contributions and Value Added

Activity	Estimated Value Added	Estimated Economic Contribution	Estimated Employment Supported
		(\$ billions)	(number)
Irrigation – Reclamation	22.6	42	305,256
Irrigation – BIA	0.5	1.1	9,758
M&I - Reclamation	3.7	4.3	24,000
Total	26.8	47.4	339,014

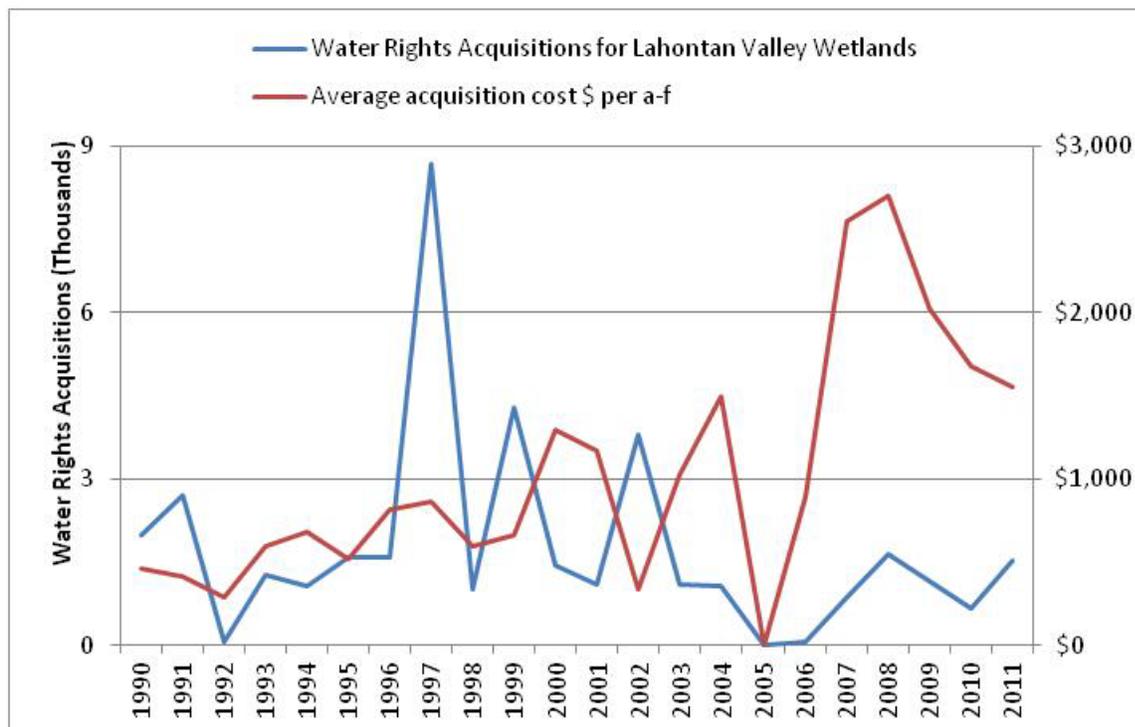


Figure A3-11. Lahontan Valley Water Rights Acquisitions

Source: FWS data.

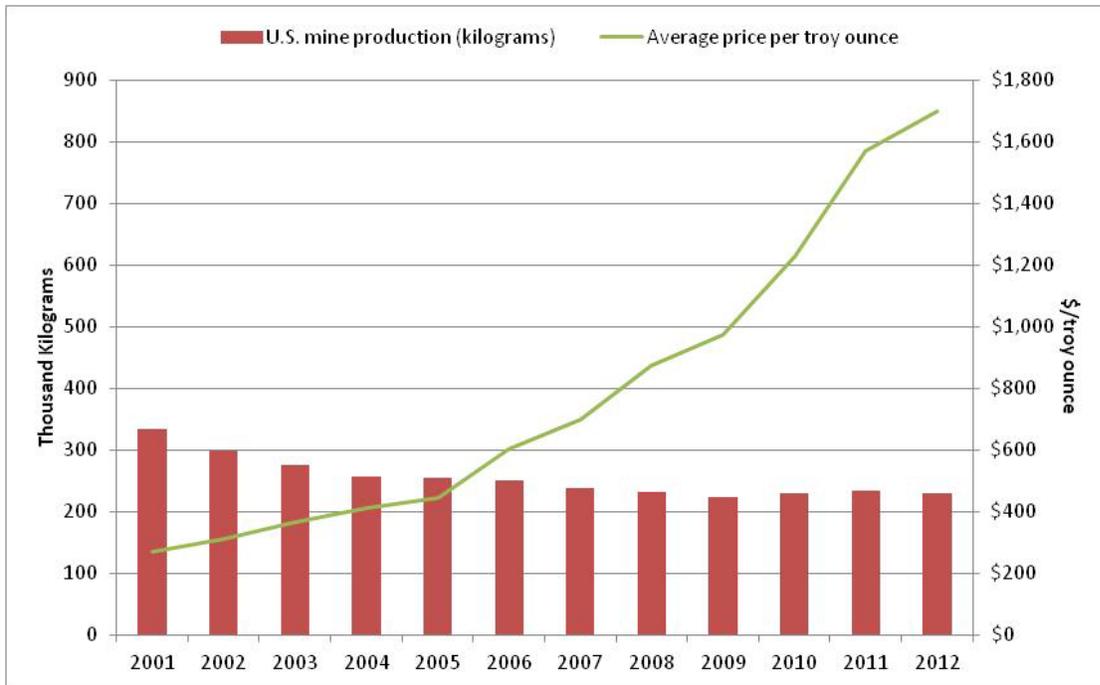


Figure A3-12. Gold Production and Prices, 2001 – 2012

Source: USGS Mineral Commodity Summaries.

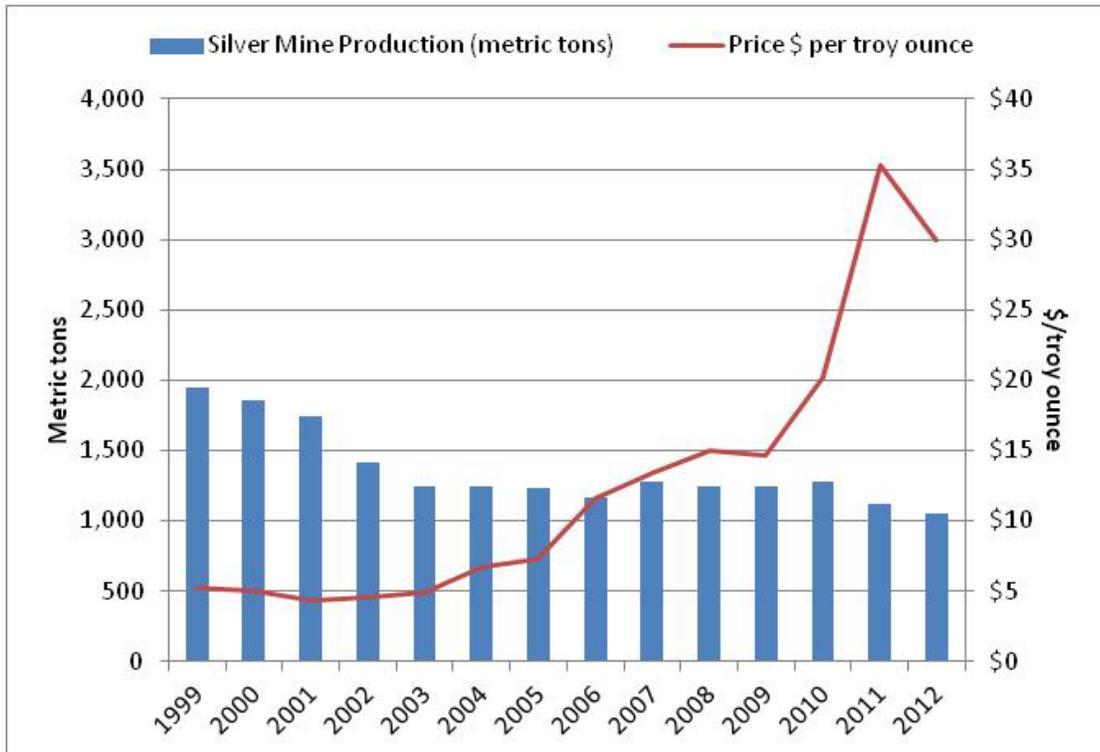


Figure A3-13. Silver Production and Prices

Source: USGS Mineral Commodity Summaries.

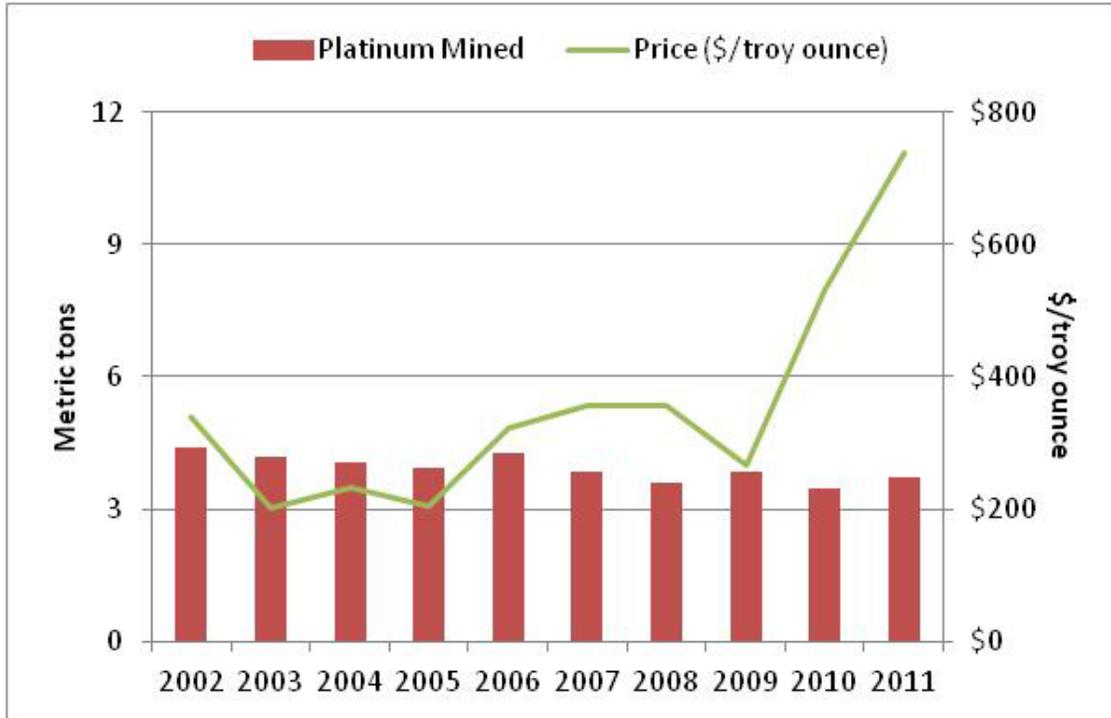


Figure A3-14. Platinum Mined and Prices

Source: USGS Mineral Commodity Summaries.

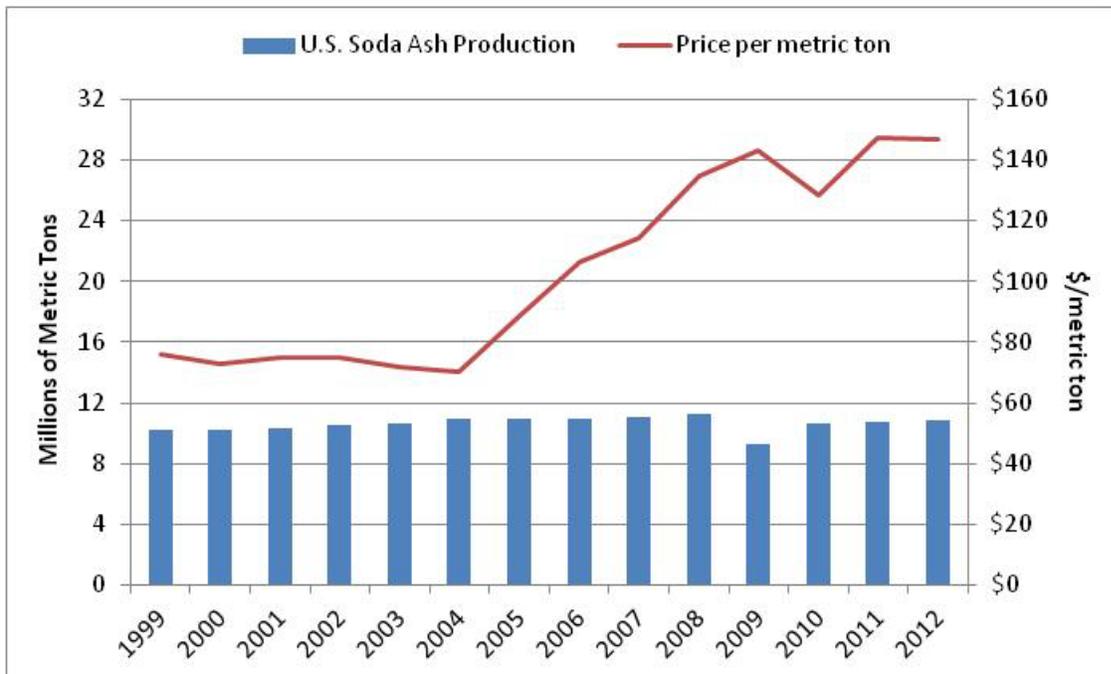


Figure A3-15. Soda Ash Production and Prices

Source: USGS Mineral Commodity Summaries.

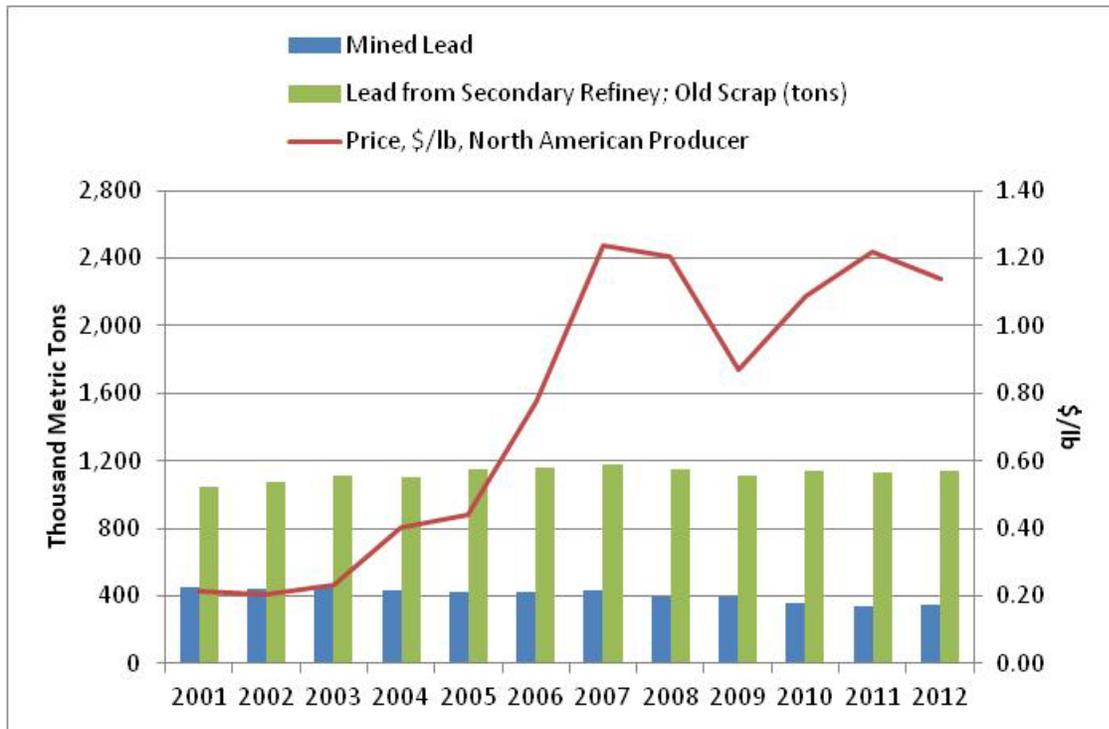


Figure A3-16. Lead Production and Prices

Source: USGS Mineral Commodity Summaries.

Table A3-5. Non-fuel Minerals - Value Added, Economic Contributions, and Employment Supported

Mineral type	Estimated Value Added	Estimated Economic Output	Estimated Employment Supported
		(\$ billions)	(number of jobs)
Non-locatable	3.04	4.97	25,795
Locatable	10.01	16.08	84,736

Table A3-6. Sales Values for Selected Minerals Produced on DOI Managed Lands, 2003-2012

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Carbon Dioxide Gas (CO2) (mcf)	177.18	211.88	260.57	303.57	306.99	440.38	582.28	479.96	572.94	567.13
Copper (and Cu concentrate)	16.32	42.25	44.86	49.02	57.59	28.01	302.62	237.44	125.12	49.20
Langbeinite (incl coarse, granular, special std, standard)	70.61	79.70	77.06	41.57	118.10	51.37	333.82	150.24	163.25	230.38
Lead Concentrate (ton)	21.78	61.82	78.11	104.17	187.71	296.31	130.37	209.73	243.96	175.25
Muriate of Potash (coarse, granular, standard)	101.75	50.12	121.90	89.93	124.28	163.00	207.52	190.73	253.97	265.25
Phosphate (concentrate and raw ore)	86.45	68.93	83.27	41.39	42.64	45.73	64.24	163.21	180.12	205.63
Potash (ton)	89.40	30.00	64.07	(22.45)	85.93	30.08	217.23	113.38	117.76	148.10
Soda Ash (incl granular)	297.06	204.82	347.19	526.00	625.26	935.37	887.38	884.42	1,004.88	833.43
Sulfur (incl geothermal)	8.77	10.95	9.79	15.36	7.29	102.02	44.85	23.58	60.80	83.91
Other minerals	104.27	98.09	86.90	139.25	187.91	151.88	145.88	200.13	267.36	244.42
Grand Total	1,097.86	979.15	1,317.63	1,445.51	1,884.60	2,413.07	3,058.24	2,489.88	3,440.27	2,978.62

Source: ONRR data.

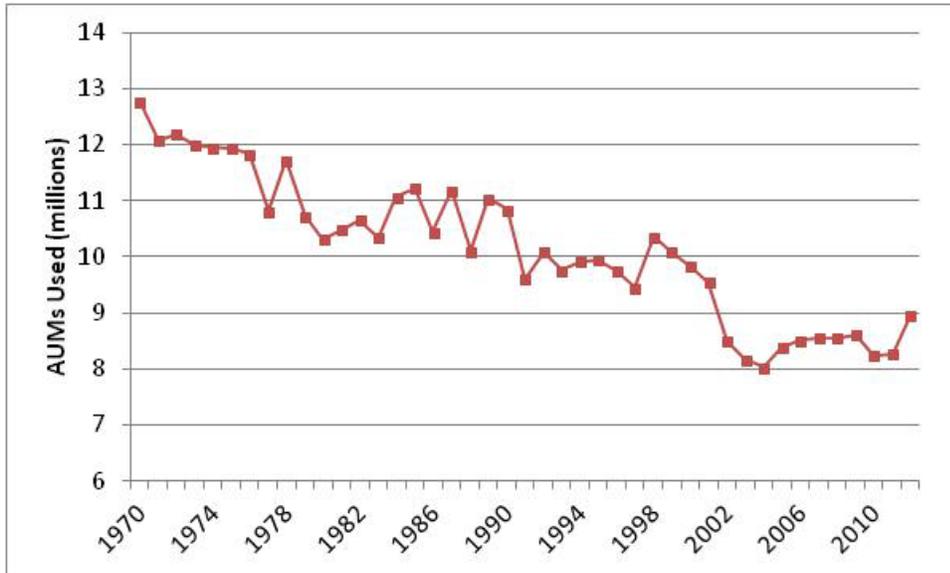


Figure A3-17. BLM AUMs Used, 1970-2012

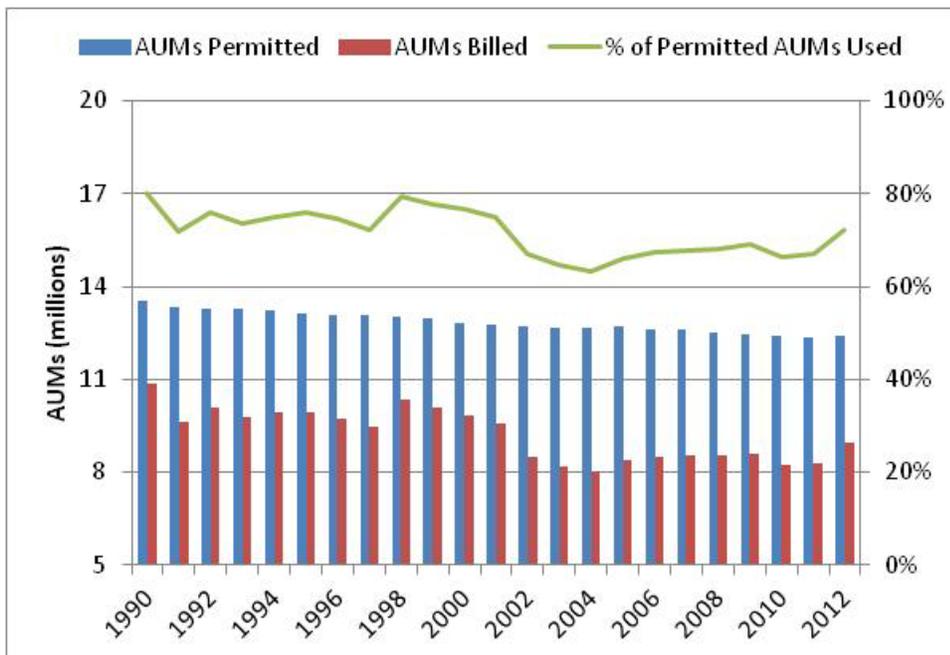


Figure A3-18. Permitted and Billed AUMs, 1990-2012

Source for both figures: BLM data.

Table A3-7. BLM Grazing Fees, 1981-2012

Year	Nominal Fee per AUM	Inflation-Adjusted Fee per AUM (2012 \$)
1981	\$2.31	\$5.83
1982	\$1.86	\$5.50
1987	\$1.35	\$4.67
1988	\$1.54	\$4.48
1989	\$1.86	\$4.28
1990	\$1.81	\$4.06
1991	\$1.97	\$3.89
1992	\$1.92	\$3.78
1993	\$1.86	\$3.67
1994	\$1.98	\$3.58
1995	\$1.61	\$3.48
1996	\$1.35	\$3.38
1997	\$1.35	\$3.30
1998	\$1.35	\$3.25
1999	\$1.35	\$3.18
2000	\$1.35	\$3.08
2001	\$1.35	\$2.99
2002	\$1.43	\$2.95
2003	\$1.35	\$2.88
2004	\$1.43	\$2.81
2005	\$1.79	\$2.72
2006	\$1.56	\$2.63
2007	\$1.35	\$2.56
2008	\$1.35	\$2.46
2009	\$1.35	\$2.47
2010	\$1.35	\$2.43
2011	\$1.35	\$2.36
2012	\$1.35	\$2.31

Source: *Grazing Fees: Overview and Issues*. Congressional Research Service. June 19, 2012; *Study of Fees for Grazing Livestock on Federal Lands*. 1977. DOI and USDA. Page 2-33. <http://tinyurl.com/FedGrazing1977>. Nominal fees adjusted for inflation using the CPI-U.

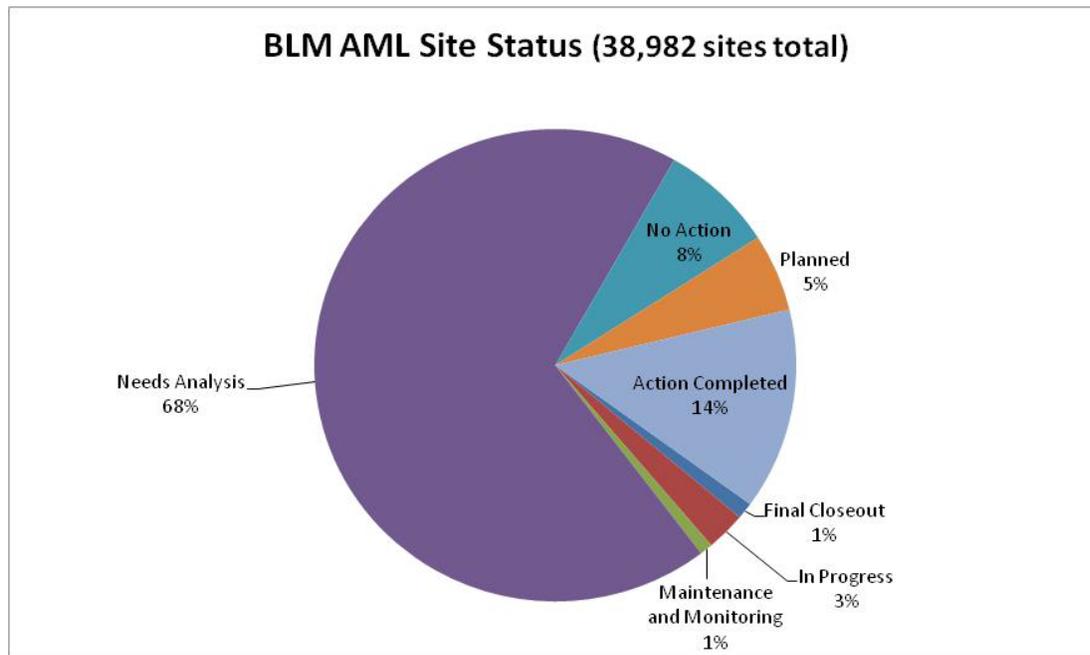
Table A3-8. BLM's FY 2006-2011 Abandoned Mine Land Accomplishments-at-a-Glance

Inventory Status	FY 2006-2008*	FY 2009-2011
BLM AML Funding	\$27 million	\$77 million
AML inventory of known sites on public lands	16,000 sites	28,000 sites
Number of AML sites discovered, evaluated, prioritized for funding	3,487 sites	11,840 sites
# Restored AML sites	1,288 sites	3,143 sites
# Acres AML restored	4,137 acres	4411 acres
# Acres of AML addressed to restore water quality	≈1,470 acres	≈1,600 acres
# Restored AML sites monitored and maintained	949 sites	2,070 sites

*BLM baseline for future accomplishments reporting.

Source: BLM, *Abandoned Mine Lands: A New Legacy*, December 2012.

Figure A3-19. BLM AML Site Status (as of January 10, 2013)



Source: BLM data

Table A3-9. Resources Restored, Enhanced and Protected by the DOI Restoration Program

Performance Goal	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
# acres restored or enhanced	13,403	15,462	24,914	41,183	68,834	87,709	97,813
# stream-miles or shoreline miles restored or enhanced	42	171	391	186	377	401	409

Source: DOI Office of Restoration and Damage Assessment, May 2013.

Table A3-10. FWS Environmental Contaminants Program Activities

Activity	Performance Goal	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
Investigation/ Assessment	# contaminant actions benefiting FWS lands	N/A	N/A	1,764	1,006	1,755
	# of NRDAR cases in progress	277	258	267	TBA	277
Restoration*	Number of non-DOI riparian (stream/ shoreline) miles restored, including through partnerships, as specified in plans or agreements that involve DOI	9,796	11,054	3,334	891	1,748
	Number of non-FWS upland acres restored, including acres restored through partnerships, as specified in plans or agreements that involve FWS	384,960	271,138	240,345	191,288	166,718
	Number of non-FWS wetland acres restored, including acres restored through partnerships, as specified in management plans or agreements that involve FWS	974,658	458,713	363,141	372,004	235,537
Recovery	Percent of populations of native aquatic non-T&E species managed or influenced by the Fisheries Program for which current status and trend is known	40% (592/1,472)	34% (526/1,569)	32% (502/1,708)	34% (542/1,723)	35% (578/1,632)
	Percent of all migratory bird species that are at healthy and sustainable levels	62.3% (568/912)	62.3% (568/912)	72.0% (725/1,007)	72.1% (726/1,007)	72.1% (726/1,007)

*FWS NRDAR restoration activities are reported under the DOI Restoration Program

Source: FWS Environmental Contaminants Program, May 2013.

Table A3-11. CHF Program Activities

Activity	FY 1995-2012*
CHF funding	\$175 million
Recoveries from potentially responsible parties (PRPs)	\$65.4 million
In-kind work	≈\$250 million
# contaminated sites	65
# sites with cleanup complete	20

*CHF baseline for future accomplishments reporting.

Source: Office of Environmental Policy and Compliance, March 3013.

Table A3-12. Indian Affairs: Value Added, Output and Employment Supported

Activity	Estimated Value Added	Estimated Economic Output	Estimated Employment Supported
	\$ billions		number
Oil, gas, coal	12.6	14.3	67,517
Other minerals	0.14	0.19	1,204
Irrigated agriculture	0.5	1.1	9,758
Forestry	0.11	0.72	3,565
Loan guarantees	0.045	n/a	679
Support for tribal governments	0.8	1.2	10,058
Total	14.2	17.6	93,476

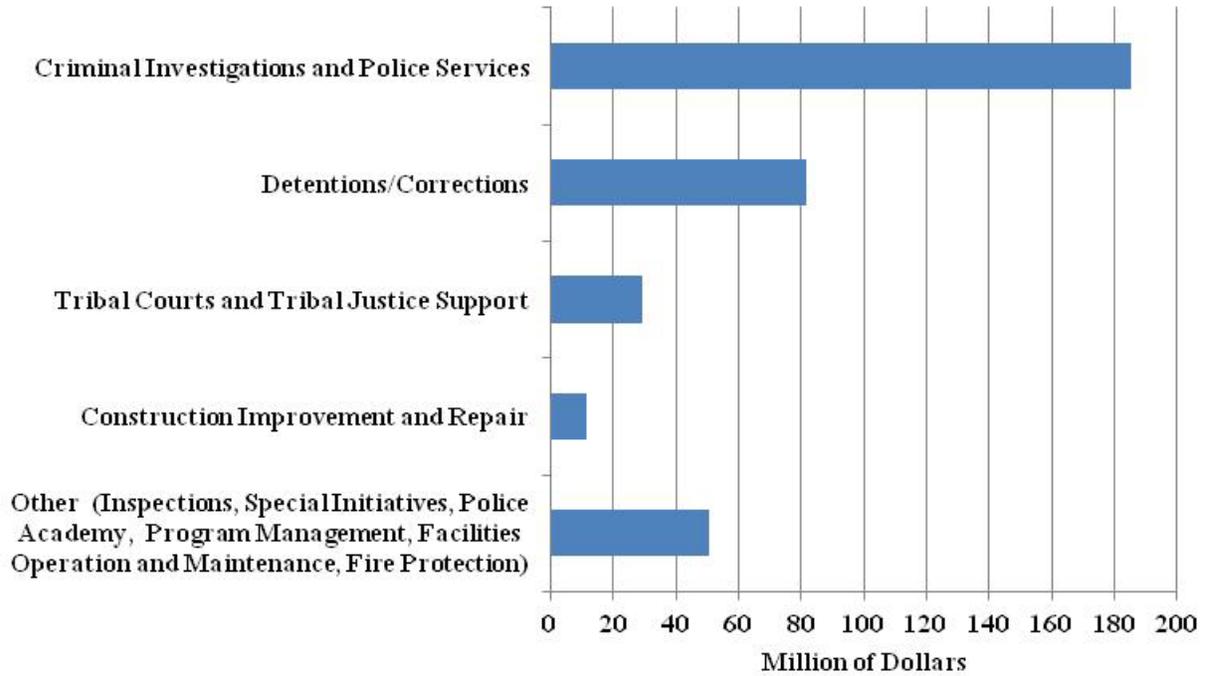


Figure A3-20. Indian Affairs FY 2012 Expenditures on Public Safety and Justice Services

Source: DOI.

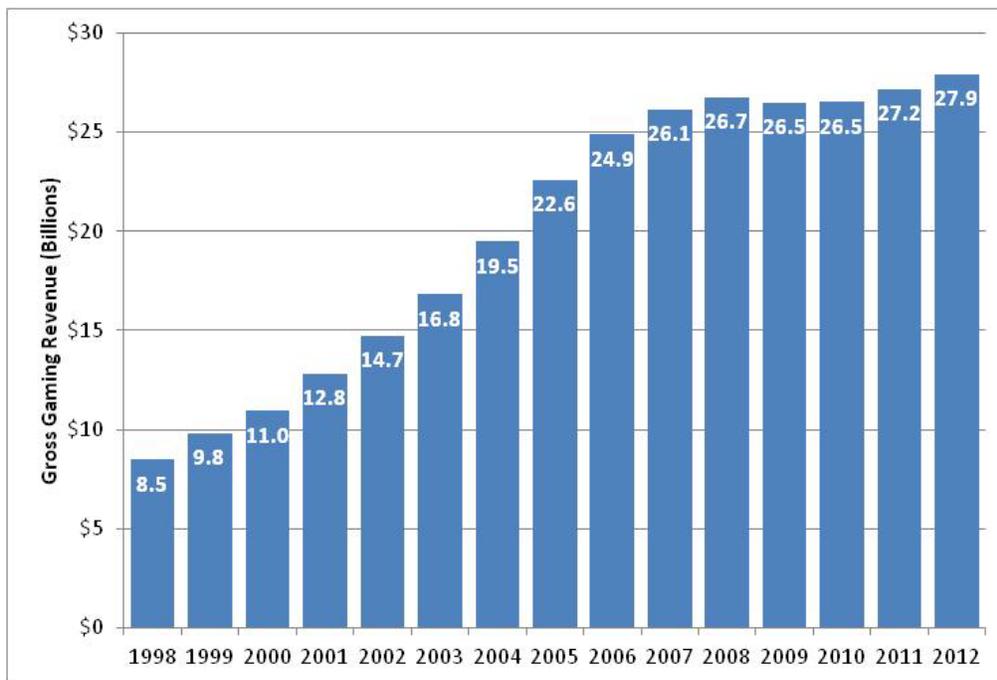


Figure A3-21. Indian Gaming Revenue in Billions of Dollars (1998–2012; Not adjusted for inflation)

Source: National Indian Gaming Commission Website (http://www.nigc.gov/Gaming_Revenue_Reports.aspx).

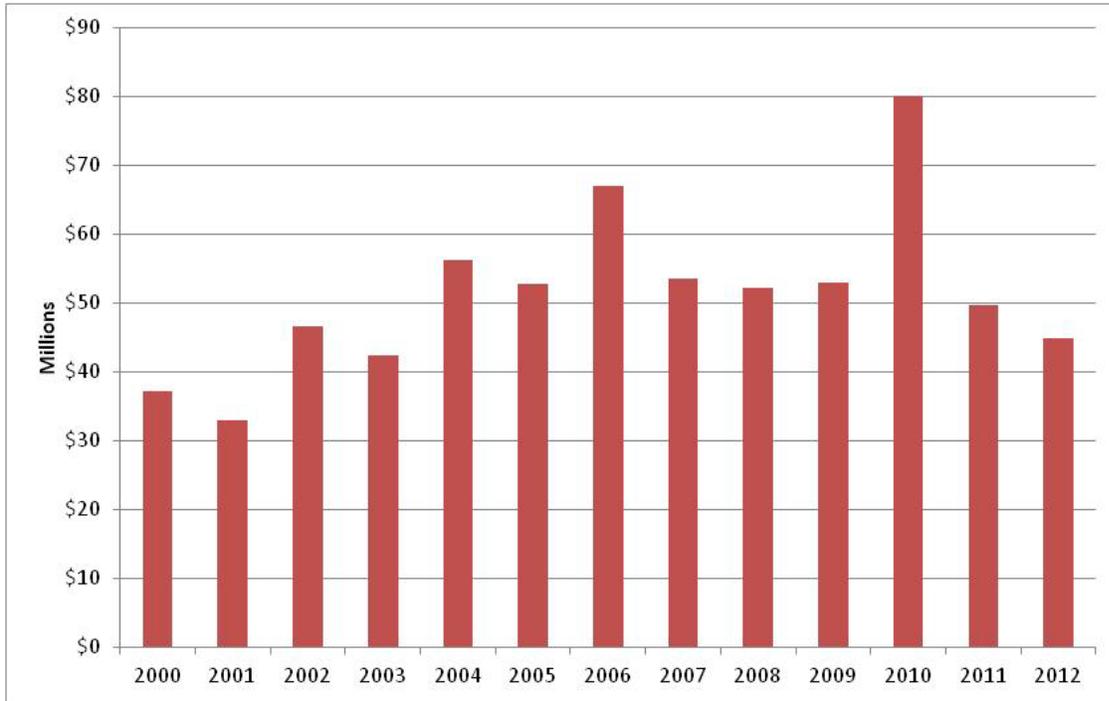


Figure A3-22. Value Added from Investments Supported by Indian Affairs Guaranteed Loans

Source: Based on Indian Affairs estimates.

Table A3-13. Economic Contributions of Interior's Major Grants and Payments Programs

Grant/Payment Program	FY 2012 Funding (\$ billions)	Estimated Value Added (\$ billions)	Estimated Economic Output (\$ billions)	Estimated Employment Supported (jobs)
Abandoned Mine Lands Grants	0.49	0.72	1.21	7,817
Coastal Impact Assistance Program Grants	0.48	0.76	1.15	9,545
Cooperative Endangered Species Conservation Fund Grants	0.05	0.07	0.11	902
Historic Preservation Fund Grants	0.05	0.07	0.14	959
Land and Water Conservation Fund Grants to States w/ GOMESA	0.04	0.05	0.10	671
Mineral Revenue Payments	2.08	3.25	4.93	41,067
OSM Regulatory Grants	0.07	0.11	0.16	1,351
Other National Park Service Grant Programs	0.01	0.01	0.02	155
Payments In Lieu of Taxes	0.39	0.61	0.93	7,742
Refuge Revenue Sharing	0.02	0.03	0.04	338
Sport Fish Restoration Grants	0.43	0.66	1.02	8,344
State and Tribal Wildlife Grants	0.06	0.09	0.14	1,147
Tribal Governments Support ¹	0.58	0.84	1.21	10,549
WaterSmart Grants	0.01	0.01	0.02	135
Wildlife Restoration Grants	0.39	0.61	0.94	7,675
Total	5.15	7.91	12.11	98,395

¹ Includes aid to tribal governments, consolidated tribal government program, self-governance compacts, contract support, Indian self-determination fund, new tribes, small and needy tribes, and road maintenance.

Table A3-14. Economic Characteristics by Insular Area

	Estimated Population (#)	Estimated Employment (#)	Estimated Employee Compensation (\$'000, 2011\$)	GDP (\$'000, 2011\$)	GDP per Capita (2011\$)
American Samoa	55,519	15,434	242,452	634,413	11,427
Guam	159,358	68,025	1,679,585	4,721,474	29,628
Northern Mariana Islands	53,883	21,399	317,984	756,137	14,033
U.S. Virgin Islands	106,405	45,095	1,544,992	4,639,981	43,607
Micronesia	102,843	15,924	68,314	310,288	2,994
Marshall Islands	52,921	10,482	101,566	170,748	3,212
Palau	20,472	11,678	102,759	179,900	8,729
United States	309,349,689	-	-	-	48,442

Source: Reprint of Table 1-1 from Economic Impacts Attributable to FY 2012 Federal Grants and Payments to Seven Insular Areas, Final Report, RTI International, December 2012. Available online at: <http://www.doi.gov/oia/reports/OIAeconomicreports.cfm>.

Table A3-15. Economic Impact Summary of OIA Grants and Payments, FY 2012

	Total OIA Payments (\$'000, 2011\$)	Total OIA Employment Impact (#)	National Employment Supported by OIA Payments (%)	Total OIA Employee Compensation Impact (\$'000, 2011\$)	National Employee Compensation Supported by OIA Payments (%)	Total OIA GDP Impact (\$'000, 2011\$)	National GDP Supported by OIA Payments (%)
American Samoa	35,932	1,561	10%	25,229	10%	136,334	21%
Guam	82,462	4,598	7%	124,537	7%	185,036	4%
Northern Mariana Islands	16,582	1,150	5%	17,218	5%	42,468	6%
U.S. Virgin Islands	199,114	13,376	30%	455,458	29%	516,828	11%
Micronesia	108,405	7,638	48%	49,930	73%	183,793	59%
Marshall Islands	71,519	4,013	38%	42,171	42%	105,978	62%
Palau	30,220	2,391	20%	26,859	26%	56,766	32%
Total	544,233	34,726	18%	741,402	18%	1,227,202	11%

Source: Reprint of Table ES-1 from Economic Impacts Attributable to FY 2012 Federal Grants and Payments to Seven Insular Areas, Final Report, RTI International, December 2012. Available online at: <http://www.doi.gov/oia/reports/OIAeconomicreports.cfm>.

Table A3-16. Collaborative Relationships for Research and Development

FY 2012	USGS	FWS	Reclamation	BSEE	TOTAL
CRADAs, total active in the FY ⁽¹⁾	365	4	10		379
New, executed in the FY	283		1		284
Traditional CRADAs, ⁽²⁾ total active in the FY	17	4	7		28
New, executed in the FY	5				5
Non-traditional CRADAs, ⁽³⁾ total active in FY	348		3		351
New, executed in the FY	278		1		279
Other collaborative R&D relationships					
Collaborative Agreements, total active in the FY	275	n/a		8	283
New, executed in the FY	158	n/a		7	165

Source: U.S. Department of the Interior. Annual Report on Technology Transfer FY 2012 Activities, January 2013.