

United States Department of Agriculture



Natural Resources Conservation Service
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SUBJECT: Rhode Island Geographic Area Rate Cap (GARC) for GRP DATE: December 28, 2009

TO: Joe Bachand, Program Manager File Code: 440-9-11
Warwick, Rhode Island

CC: J. Eric Scherer, SRC
Warwick, Rhode Island

As per our meeting on June 3, 2009 regarding National Bulletin: 440-9-11, Subject LTP-Grassland Reserve Program (GRP) Easement Compensation Procedures and a follow up meeting on December 22, 2009, I have researched real estate price indices and land values to develop county-based Geographical Area Rate Caps (GARC) for the Rhode Island GRP easement program. Given that the GARC for GRP was set just six months prior, the same GARC rate for the counties are listed for FY2010 as were listed for FY 2009. The primary difference in FY 2010 is that Block Island was broken out from the Kent/Washington County and a per acre GARC is proposed specifically for Block Island.

The results of this analysis propose the following GARCs:

County	GARC \$/ Acre
Bristol	\$25,845.00
Kent/Washington (excluding Block Island)	\$11,300.00
Newport	\$23,865.00
Providence	\$17,035.00
Block Island	\$59,555.00

An explanation and supporting documentation for the FY 2010 GRP GARC Cap is attached.

Please advise if further assistance is needed.

REENA L. SHAW
ECONOMIST

Attachments: Attachment A: Data Sources and Summary of Methodology
Attachment B: RI NRCS Land Value Index
Attachment C: Rhode Island NRCS GRP GARC Values

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Attachment A: Data Sources and Summary of Methodology

Data Sources

We have chosen to use data source item numbers 1, 2, and 4 from the list below as provided in NB 440-9-XX, page 3. Data from all sources was averaged and rounded to the nearest thousand dollars to establish the Geographic Cap for Rhode Island.

1. Historic GRP easement values;
2. Local pasture and/or ranchland market values;
3. Property features such as size, location, and access to water;
4. Tax rates and assessments.
5. National, State, or local agricultural statistics.
6. Grazing values for other federal or state programs.

Item #1

Data related to item number 1, Historic GRP easement values, was obtained in-house from Rhode Island NRCS GRP easements.

Item #2

Data related to item number 2, Local pasture and/or ranchland market values, was obtained in-house from Rhode Island NRCS GRP easements and the market value of FRPP land in Rhode Island. This data was categorized by county for years 2003, 2005-2009. The market prices were adjusted from the base year to 2009 dollars using real estate price indices (Attachment A: RI NRCS Land Value Index).

Item #4

Data related to item number 4, Tax Rates and Assessments. Land values for Bristol County were obtained from the Warren Town Assessor.

Methods

Step 1: Adjusting Land Values from Prior Years to 2009 Dollars

Adjusting the market land values from prior years to reflect the 2009 dollar value was accomplished by creating a land value index based on several sources for land values (Attachment B: RI NRCS Land Value Index).

The percent change in Rhode Island land values for years 2006, 2007, and 2008 were estimated using the average of data from [www. realtor.org](http://www.realtor.org): RI, Providence Metro Area Prices, Single Family Spreadsheet; and RI, State Existing Home Sales Spreadsheet. Both of these datasheets were accessed on June 3, 2009.

The percent change in Rhode Island land values for year 2003 were estimated using the average data from Standard & Poor's/Case Shiller Home Price Indices. Seasonally adjusted

home price values: Boston, Massachusetts; and National, March 2009, published May 26th, 2009.

The percent change in Rhode Island land values for year 2005 were estimated using the average data from Standard & Poor's/Case Shiller Home Price Indices. Seasonally adjusted home price values: Boston, Massachusetts, March 2009, published May 26th, 2009.

The results of this research estimates the following percent change in Rhode Island real estate market prices:

Year	Percent Change
2003	-.0661
2005	-.1791
2006	-.2942
2007	-.2687
2008	-.1335

Using this data we calculated the percent change in the real estate value of properties for which we purchased easements or are in the process of purchasing easements from the base year of the appraisal to 2009.

For example, if the market value in 2006 was listed at \$100,000 for 10 acres, our estimate of the land value in 2009 is estimated by the following calculation:

$$\$100,000 + (100,000 * -.2942) = \$70,580.00$$

This calculation was performed for Rhode Island's easement properties in counties Bristol, Kent/Washington (combined) Newport, and Providence.

Step 2: Estimating the Percent Value of an Easement

Using GRP easement data and the market data for the land, we calculated the percent value of prior year easements to the appraised market value.

For example, if the market value was \$100,000 for 10 acres and we paid \$82,000 for the ten acres, then the percent value of the GRP was estimated by the following calculation:

$$82,000/100,000 = .82$$

This calculation was performed for all of Rhode Island's GRP easements and then averaged. The result is that on average, GRP easements are worth approximately 82% of the market value of the land statewide.

Step 3: Calculating the GARC

For each county category in Rhode Island, the base market value for land was adjusted to 2009 dollars as shown in Step 1. The adjusted dollars were divided by the number of acres to obtain the per acre estimate for 2009 land values. The Median per acre value was then used in Step 2 to obtain the GARC for Rhode Island (Attachment C: Rhode Island NRCS GRP GARC Values).

For example, suppose there are two different parcels in Kent County, one was 10 acres, valued at \$100,000 in 2006. Another parcel is 20 acres, valued at \$100,000 in 2003. The 2009 estimated value:

$$\text{Parcel 1: } \$100,000 + (100,000 * -.2942) = \$70,580.00$$

$$\text{Parcel 2: } \$100,000 + (100,000 * -.0661) = \$93,390.00$$

The per acre value:

$$\text{Parcel 1: } \$70,580.00 / 10 = \$7,058.00$$

$$\text{Parcel 2: } \$93,390.00 / 20 = \$4,670.00$$

The median per acre value: \$5864.00

Applying the percent value of the easement from Step 2, the GARC value:

$$\text{GARC: } \$5864.00 * .82 = \$4808.00$$

Special Note about Block Island

Current year Assessor's data for nine properties located on Block Island, 21 to 42 acres in size, were used to calculate the GARC. Since this data is recent, Step 1 was not used to adjust the land values for Block Island. The properties used to calculate the GARC are properties with characteristics required to qualify for GRP.

The total land value for the Block Island properties used in the GARC calculation range from \$1,460,500 to \$4,523,600 with a per acre land value range of \$48,375 to \$199,453. The median value of the per acre land value is listed as our GARC. The median value was chosen over the average due to the high variability of the land values. This is a common reporting statistic for highly variable data such as home values and general real estate.

The Assessor's data is set at 80% of the property market value, thus the formulas discussed in Step 2 and Step 3 were not applied to obtain the GARC for Block Island. The per acre median land value for Block Island properties with characteristics that will qualify them for the GRP program is \$59,555 per acre.