



Transitioning the EEP Nutrient Offset Program to an Actual Cost Method

Results and Discussion

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Ecosystem Enhancement Program

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- Review Objectives
- Review Proposed Components of ACM
- ACM Results and Discussion

Actual Cost Method Objectives:

- Must use actual costs of generating nutrient reduction credits.
- All costs must be accounted for in the method.
- Must be a self-sustaining financial model.

Actual Cost Method Objectives:

- Rates must change (upwards or downwards) as actual costs change.
- Rates must adapt to changes in regulations.
- Method must be applicable at either Cataloging Unit (CU), Basin, or State levels.
- Must be applicable to either nitrogen or phosphorus offsets.

Actual Cost Method Objectives:

- Must be understandable and easy to use.
- Must be predictable and equitable.
- Transition Plan by September 2009.

Issues and Choices

- Geographic Application?
 - Program Level
 - Basin Level
 - Cataloging Unit Level
 - Hybrid
- Frequency of Adjustment?
- Length of Adjustment Period?
- Should Costs be Adjusted below Actual Costs?

Proposed Geographic Rates

1. Special Rate Designated Areas
 - a. Neuse 01 Nitrogen Rate
2. Program Nitrogen Rate
3. Program Phosphorus Rate

Proposed ACM Components

Timing:

- Recalculate Rates Annually or Quarterly if:
 - Avg. Cost of new projects rise >10%
 - Or Unencumbered Cash < Future Contract Costs

Rate Adjustment Length and Amount

- Adjustment Length = 4 years
- Use 3 year running average to calculate average pounds expected to be paid per year

Proposed ACM Components

Adjusting for Inflation

Land Costs – NCDA Ag. Statistics - Farm Real Estate Values

Other Costs –USACE Civil Works Construction Cost Index

Administration Costs

- Admin Costs Per Payment limited to 8 years

Proposed ACM Components

Base Cost

- Minimum Actual Cost Rate will be the actual cost of implementing a new project at today's costs

Original Draft Actual Cost Method

$$\text{ActualCostRate} = \frac{\text{ActualCosts}}{\text{TotalPoundsOffset}} + \text{AdjustmentFactor}$$

Revised Draft Actual Cost Method

$$\text{ActualCostRate} = \frac{\text{ActualCosts}_{\text{PresentDay}}}{\text{TotalPoundsOffset}_{\text{PresentDay}}} + \text{AdjustmentFactor}$$

Proposed Actual Cost Method

$$\text{ActualCostRate} = \frac{\text{ActualCosts}_{\text{PresentDay}}}{\text{TotalPoundsOffset}_{\text{PresentDay}}} + \text{AdjustmentFactor}$$

$$\text{ActualCosts}_{PD} = \text{ProjectCosts}_{PD} + \text{AdministrativeCosts}_{PD}$$

Completed Projects
Terminated Projects
Existing Projects in Process

Staff
Supplies
Rent

All Costs Adjusted to Present Day Prices

Proposed Actual Cost Method

$$\text{ActualCostRate} = \frac{\text{ActualCosts}_{\text{PresentDay}}}{\text{TotalPoundsOffset}_{\text{PresentDay}}} + \text{AdjustmentFactor}$$

Total Pounds Adjusted to Present Day Values

- Represents true cost of implementing new project
- Addresses concerns over regulation changes
- Ensures rate will never be below actual cost

Adjustment Factor

$$\text{Adjustment Factor} = \frac{(\text{Actual Costs} - \text{Actual Receipts})}{\text{Number of Pounds Paid During Adjustment Period}}$$

Differences Between Actual Costs and Actual Receipts are distributed to future pounds paid into program

- Ensures additional collections are made if historical receipts were below costs

Neuse 01 Nitrogen Rate

NS 01 Projects and Basin Requirements

	Mitigation Location Requirement	Reduction Requirements	Assets (pounds reduced)
Neuse	03020201	124,730.32	287,053.51

- NS 01 Program consists of NS 01 Payments
- Old permits allowed reductions anywhere within the river basin. These were assigned to the Program N Rate.
- All NS 01 Projects were used to determine costs in NS01 but prorated
- 43.45% of costs and credits (124,730.12) were assigned to NS 01 Program and remainder were assigned to Basin Requirements (162,323.39)

Associated Reductions and Payments

- DWQ and EEP agreed to provide reductions for associated nutrients with old payments
- EEP prorated payments toward both N or P reductions based on percentage of payment that should have gone toward each
- Equitable method
- Avoids “unpaid” requirements
- Avoids inequitable Adjustment Factors

$$ActualCostRate = \frac{ActualCosts_{PresentDay}}{TotalPoundsOffset_{PresentDay}} + AdjustmentFactor$$

Neuse 01	<u>Actual Costs</u> <u>Present Day</u>	<u>Actual Costs</u>
Pounds	124,730.12	124,730.12
Project Cost	\$2,325,679.84	\$2,058,104.49
Admin Cost	\$387,614.26	\$343,018.26
Program Cost	\$2,713,294.10	\$2,401,122.75
Avg .Cost	\$21.75	\$19.25
Program Receipts	\$3,536,095.93	
Future Expected Pounds	759,876.00	

Neuse 01 Nitrogen Rate

$$\text{ActualCostRate} = \frac{\text{ActualCosts}_{\text{PresentDay}}}{\text{TotalPoundsOffset}_{\text{PresentDay}}} + \text{AdjustmentFactor}$$

$$\text{ActualCostRate} = \frac{(2,713,294.10)}{(124,730.12)} + \frac{2,401,122.75 - 3,536,095.93}{759,876.00}$$

$$\text{Actual Cost Rate} = \$21.75 + (-1.49)$$

$$= \$21.75 + \$0$$

$$= \$21.75/\text{lb N}$$

Program Nitrogen Rate

$$ActualCostRate = \frac{ActualCosts_{PresentDay}}{TotalPoundsOffset_{PresentDay}} + AdjustmentFactor$$

Program N	<u>Actual Costs</u> <small>Present Day</small>	<u>Actual Costs</u>
Pounds	928,066.92	1,376,968.03
Project Cost	\$12,537,097.64	\$14,457,434.61
Admin Cost	\$1,091,902.66	\$1,369,548.60
Program Cost	\$13,629,000.30	\$15,826,983.21
Avg .Cost	\$14.69	\$11.49
Program Receipts	\$14,118,359.96	
Future Expected Pounds	159,340.00	

Program Nitrogen Rate

$$\text{ActualCostRate} = \frac{\text{ActualCosts}_{\text{PresentDay}}}{\text{TotalPoundsOffset}_{\text{PresentDay}}} + \text{AdjustmentFactor}$$

$$\text{ActualCostRate} = \frac{(13,629,000.30)}{(928,066.92)} + \frac{15,826,983.21 - 14,118,359.96}{159,340.00}$$

Program N

Actual Cost Rate = \$14.69/lb + \$10.72/lb

= \$25.41/lb

Program Phosphorus Rate

$$ActualCostRate = \frac{ActualCosts_{PresentDay}}{TotalPoundsOffset_{PresentDay}} + AdjustmentFactor$$

Program P	<u>Actual Costs</u> <small>Present Day</small>	<u>Actual Costs</u>
Pounds	10,484.51	10,623.94
Project Cost	\$805,588.72	\$729,564.31
Admin Cost	\$54,937.76	\$49,753.22
Program Cost	\$860,526.48	\$779,317.53
Avg .Cost	\$82.08	\$73.35
Program Receipts	\$512,894.42	
Future Expected Pounds	3,600.00	

Program Phosphorus Rate

$$\text{ActualCostRate} = \frac{\text{ActualCosts}_{\text{PresentDay}}}{\text{TotalPoundsOffset}_{\text{PresentDay}}} + \text{AdjustmentFactor}$$

$$\text{ActualCostRate} = \frac{(860,526.48)}{(10,484.51)} + \frac{779,317.53 - 512,894.42}{3,600.00}$$

Program N

Actual Cost Rate = \$82.08/lb + \$74.01/lb

= \$156.08/lb

Summary of Rates

$$\text{ActualCostRate} = \frac{\text{ActualCosts}_{\text{PresentDay}}}{\text{TotalPoundsOffset}_{\text{PresentDay}}} + \text{AdjustmentFactor}$$

	<u>ACM</u>	=	<u>Present Day</u>	+	<u>Adjustment Factor</u>
Neuse 01 Rate	\$21.75/lb		\$21.75/lb		(\$1.49)/lb
Program N Rate	\$25.41/lb		\$14.69/lb		\$10.72/lb
Program P Rate	\$156.08/lb		\$82.08/lb		\$74.01/lb

Questions?

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