

Fiscal Estimate - 2013 Session

Original
 Updated
 Corrected
 Supplemental

LRB Number 13-3079/1		Introduction Number SB-547	
Description Adaptive management plans for reducing discharges of phosphorus and total suspended solids to the waters of the state and a statewide variance to the water quality standard for phosphorus for certain dischargers			
Fiscal Effect			
State:			
<input type="checkbox"/> No State Fiscal Effect			
<input type="checkbox"/> Indeterminate			
<input type="checkbox"/> Increase Existing Appropriations		<input type="checkbox"/> Increase Existing Revenues	
<input type="checkbox"/> Decrease Existing Appropriations		<input type="checkbox"/> Decrease Existing Revenues	
<input type="checkbox"/> Create New Appropriations		<input checked="" type="checkbox"/> Increase Costs - May be possible to absorb within agency's budget <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
<input type="checkbox"/> Decrease Costs			
Local:			
<input type="checkbox"/> No Local Government Costs			
<input checked="" type="checkbox"/> Indeterminate			
1. <input type="checkbox"/> Increase Costs		3. <input type="checkbox"/> Increase Revenue	
<input type="checkbox"/> Permissive <input type="checkbox"/> Mandatory		<input type="checkbox"/> Permissive <input type="checkbox"/> Mandatory	
2. <input type="checkbox"/> Decrease Costs		4. <input type="checkbox"/> Decrease Revenue	
<input type="checkbox"/> Permissive <input type="checkbox"/> Mandatory		<input type="checkbox"/> Permissive <input type="checkbox"/> Mandatory	
5. Types of Local Government Units Affected			
<input type="checkbox"/> Towns		<input type="checkbox"/> Village <input type="checkbox"/> Cities	
<input type="checkbox"/> Counties		<input type="checkbox"/> Others	
<input type="checkbox"/> School Districts		<input type="checkbox"/> WTCS Districts	
Fund Sources Affected		Affected Ch. 20 Appropriations	
<input checked="" type="checkbox"/> GPR <input type="checkbox"/> FED <input type="checkbox"/> PRO <input type="checkbox"/> PRS <input type="checkbox"/> SEG <input type="checkbox"/> SEGS			
Agency/Prepared By		Authorized Signature	
DNR/ Joe Polasek (608) 266-2794		Joe Polasek (608) 266-2794	
		Date	
		2/3/2014	

Fiscal Estimate Narratives

DNR 2/3/2014

LRB Number	13-3079/1	Introduction Number	SB-547	Estimate Type	Original
Description Adaptive management plans for reducing discharges of phosphorus and total suspended solids to the waters of the state and a statewide variance to the water quality standard for phosphorus for certain dischargers					

Assumptions Used in Arriving at Fiscal Estimate

Background:

There are two main components to the proposed legislation regarding implementation of the phosphorus water quality standard in the Wisconsin Pollutant Discharge Elimination System (WPDES) permit program:

- It authorizes adaptive management for both phosphorus and total suspended solids, and extends the time period for adaptive management to four permit terms.
- It creates a statewide variance to phosphorus water quality based effluent limitations and interim compliance steps to demonstrate progress towards compliance under the statewide variance.

Assumptions:

This estimate considers the costs of the proposed legislation compared to the costs of implementing current phosphorus regulations for municipal wastewater discharges. Costs to implement this program for industrial discharges would be additional.

This estimate also assumes that the Department of Administration will find that a statewide variance is authorized under the bill. If a statewide variance is not authorized, the bill would have a minimal impact to state and local governments.

Municipal discharges with biological treatment or chemical filtration can typically achieve compliance with phosphorus limitations of 0.4 mg/L or higher through slight operational changes or through optimization. Compliance with these limits at this level is believed to have a minimal cost to rate payers in most cases. Municipal discharges without biological treatment, such as lagoon discharges, would need to add treatment technology to comply with phosphorus limitations. Compliance costs are significant in these instances.

Municipal Discharges Not Impacted:

There are approximately 650 municipal discharges in Wisconsin. Of those, 110 facilities are groundwater discharges and not subject to phosphorus regulations.

Since 2010, 35% of municipal discharges have received phosphorus limitations in their WPDES permits when they are already in compliance, or can easily achieve compliance. Based on this trend, it is assumed that 190 municipal discharges will not be impacted by the bill, as significant facility upgrades will not be required to comply with phosphorus regulations.

Municipal Discharges Adversely Impacted:

It is projected that 350 municipal discharges will receive stringent phosphorus limits. Of those, 90 are believed to be lagoon treatment systems and would require significant facility upgrades to comply with the effluent limitations specified for the statewide variance. The cost of phosphorus removal at wastewater treatment facilities has been estimated in a 2012 report titled "Cost of Phosphorous Removal at Wisconsin Publically-Owned Treatment Works". The cost of treatment vary widely, but is estimated to be \$2,000,000/lagoon facility to comply with the interim limits specified in the bill. Lagoons would not be subject to these costs if they utilized and qualify for the existing variance procedures specified in s. NR 217.19, Wis. Adm. Code. Therefore, the concepts and process in the bill may not be utilized by some of these facilities.

Municipal Discharges Positively Impacted:

It is unclear how many of the remaining facilities would select trading, adaptive management, or the statewide variance approach. If the costs of adaptive management or trading is less than the cost of the

statewide variance (\$50/lb of phosphorous), facilities will likely select adaptive management or trading in lieu of the statewide variance. Therefore for the estimate the remaining facilities are divided equally among these three programs based on those facilities eligible for adaptive management and those that aren't according to the Department's Pollutant Load Ratio Estimation Tool (a.k.a. PRESTO model).

Given the above, 100 facilities are assumed to select the statewide variance and the water quality trading option, and 50 facilities are assumed to select the adaptive management option. The compliance cost for adaptive management and water quality trading is assumed to be a range of \$25 -- \$85/lb of Phosphorus. Higher compliance costs would likely push the facility towards the statewide variance in lieu trading or adaptive management. The mean phosphorus load reduction target is estimated to be 1,400 lbs of phosphorus based on point source loads from 2011.

With these assumptions in mind, the mean compliance costs is projected to be \$75,000 per year for those facilities that select the statewide variance approach, and would range from \$38,000 to \$120,000 per year for those facilities that select adaptive management and water quality trading. This is compared to an average compliance cost of \$1.5 million per facility to install treatment technology, according to the previously mentioned report. This cost represents a one-time investment for treatment technology. Operation and maintenance costs are also incurred annually, but the incremental increase would be relatively modest.

Impacts to WDNR staff time:

Resources will be required to successfully implement the bill, both at the initial imposition of the bill and long-term in order to maintain the program. These needs are estimated below:

1. Permit drafting; estimated resource need: 300 staff hours at initial imposition of Bill.
2. Calculating site-specific effluent limitations; estimated resource need: 700 staff hours at initial imposition of the bill (2 hours/permit assumed).
3. Modify or revoke and reissue WPDES permits to implement new regulations; estimated resource need: 1,050 staff hours at initial imposition of the bill (3 hours/permit assumed)
4. Develop agreements with County LCD staff: 1,000 staff hours at initial imposition of Bill (assumptions: 25 hours/agreement, 40 participating counties)
5. Review and track annual reports; estimated resource need: 5,000 staff hours/yr (50 hours/permit assumed)
6. Compliance checks and audits; estimated resource need: 4,200 staff hours/yr (12 hrs/permit assumed)
7. Outreach and education with partners including County LCD staff, DOA, and USEPA as well as stakeholders including point sources, environmental groups and other interested entities; estimated resource need: 700 staff hours/yr (2 hours/permit assumed).
8. Recertification of variance and permitting decisions upon permit reissuance; estimated resource need: 8,400 staff hours/permit term (4 hours/variance assumed).

Some resources may be saved through imposition of the bill as well. Using a statewide variance approach in lieu of a individual variance approach would save approximately 400 staff hours (4 hours/variance request).

Therefore, a net of 3,050 staff hours would be needed at the initial imposition of the bill and 18,300 staff hours (wastewater specialist and water resources management specialists @ \$55,000 for salary/fringe/supplies equaling 10 FTE) would be needed for continued support of the program.

Some of these hours would replace current permit workload, which is difficult to estimate at this time. However, because of this, the Department believes it may be possible to absorb the additional workload incurred from the bill.

One-time implementation costs are estimated at \$100,000.

Revenue Impact

The Department estimates that the bill will not significantly impact collections of WPDES fees, which are deposited directly to the state's general fund.

Long-Range Fiscal Implications

Extending the adaptive management timeline would have a long-range fiscal benefit for those facilities that

select adaptive management. Additionally, costs of treatment may decrease over time, which may positively impact those facilities that trade or get a variance. These impacts are indeterminate.

Fiscal Estimate Worksheet - 2013 Session

Detailed Estimate of Annual Fiscal Effect

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I. One-time Costs or Revenue Impacts for State and/or Local Government (do not include in annualized fiscal effect): \$100,000 for one-time implementation costs			
II. Annualized Costs:		Annualized Fiscal Impact on funds from:	
		Increased Costs	Decreased Costs
A. State Costs by Category			
State Operations - Salaries and Fringes	\$		\$
(FTE Position Changes)			
State Operations - Other Costs			
Local Assistance			
Aids to Individuals or Organizations			
TOTAL State Costs by Category	\$		\$
B. State Costs by Source of Funds			
GPR			
FED			
PRO/PRS			
SEG/SEG-S			
III. State Revenues - Complete this only when proposal will increase or decrease state revenues (e.g., tax increase, decrease in license fee, etc.)			
		Increased Rev	Decreased Rev
GPR Taxes	\$		\$
GPR Earned			
FED			
PRO/PRS			
SEG/SEG-S			
TOTAL State Revenues	\$		\$
NET ANNUALIZED FISCAL IMPACT			
		<u>State</u>	<u>Local</u>
NET CHANGE IN COSTS	\$		\$
NET CHANGE IN REVENUE	\$		\$
Agency/Prepared By		Authorized Signature	
DNR/ Joe Polasek (608) 266-2794		Joe Polasek (608) 266-2794	
		Date	
		2/3/2014	