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# Montana Legislative Services Division

## Legislative Environmental Policy Office

**Memorandum**

To: Environmental Quality Council Members

From: Krista Lee Evans, Research Analyst

RE: Variable Beneficial Use Fee for Funding the Water Adjudication

Date: April 20, 2004

This paper is to provide the information that the EQC will need to make an informed decision regarding the implementation of a variable use fee for the beneficial use of Montana's water resource. The paper will provide specific numbers as a starting point for the Council in an effort to help determine the cost to each user group. **The fees in this paper have not been adopted by the EQC. They are for the purpose of understanding the fee structure and adopting a fee schedule. The Council may choose to use the fees outlined here or may choose to adjust them.**

The revenue generated by the beneficial use fee is intended to be used to facilitate the completion of the water adjudication in 15 years.

## The Basics

The beneficial use fee will be applied to all water rights. All water rights means both water rights that are claimed and subject to the adjudication as well as all new appropriations for ground water and surface water. In other words, every person, excluding the Federal Government, that uses water in Montana will be assessed a fee.

The Department of Revenue (DOR) is the reasonable agency to take care of collecting fees. The DNRC would provide the appropriate numbers to DOR so that bills can be sent out and fees collected.

## Funding Needed

The amount of funding that will be needed to complete the adjudication in 15 years (10 years for DNRC claims examination and 5 years for the Water Court to finish up) is based on the numbers that were provided to staff by the three elements of the adjudication program in January. It is broken out in the appropriate time spans in the table below for your review. The Compact Commission expires in 2009 per statutory guidance, therefore, the numbers for subsequent years do not include the Compact Commission.

It is important to note that the amount needed for the first couple of years should be increased because of administrative costs associated with getting the billing system set up, providing the

information to DOR for the billing procedures, and any appropriation that may need to go to DOR to accomplish this new requirement. I was hesitant to ask DOR to spend the time necessary to determine this administrative cost without knowing for sure if the Council will move forward with the variable beneficial use fee concept. DOR will also need to know specifically what will be required of them.

If the Council chooses to move forward with a variable beneficial use fee the bill would be drafted to set up a water adjudication account where the money would be deposited and appropriated from.

| Years | Program Element | Current | Additional Needed | **Total <u>Per Year</u>** |
|---|---|---|---|---|
| 2006-2009 | DNRC | $644,009 | $1,361,001 | $2,005,010 |
| | Water Court | $653,454 | $220,651 | $874,105 |
| | Compact Commission | $709,946 | $0 | $709,946 |
| | | | | **3,589,061/yr** |
| 2010-2016 | DNRC | $644,009 | $1,361,001 | $2,005,010 |
| | Water Court | $653,454 | $220,651 | $874,105 |
| | | | | **$2,879,115/yr** |
| 2017-2021 | DNRC (post decree assistance to the Water Court) | $559,827 | $0 | $559,827 |
| | Water Court | $653,454 | $220,651 | $874,105 |
| | | | | **$1,433,932/yr** |
| | | | | |
| Total Cost for 15 year completion | | | | **$38,090,648** |
| Total Estimated Cost for completion at current pace and cost[1] | | | | **$51,012,522** |

**<u>Funding Source</u>**

The challenges with figuring out how a variable fee would work were many. I will outline below the decisions that were made to get the most accurate answers for the Council. Jim Gilman, Adjudication Program Manager, DNRC, was instrumental in pulling together the beneficial use

[1]This estimate is reflected in 2004 dollars and was arrived at by using the current funding levels and multiplying it by 3 years for the Compact Commission, 33 years for DNRC plus 5 years at the rate that will be required for post decree assistance, and 38 years for the Water Court (assuming it will take the Water Court 5 years to finish after DNRC has completed the examination process).

numbers. He went through every beneficial use and every claim and water right to determine which category applied.

Because of the large variation in the flow rates, volumes, and acres that are claimed or that exist in water rights, it was necessary to establish a cut off point for a "flat fee" rather than the "variable fee". A flat fee would be imposed on those flow rates or volumes that are fairly minimal in comparison to other claims or rights and the money raised from imposing the variable fee would probably be less than the amount that it would cost to assess the fee.
We had to determine "categories" to place the claims and rights in because of the various ways in which they are claimed, decreed, or filed. Since not all of the basins in Montana have been examined, some of the numbers are probably inaccurate and larger than what will be determined through the examination process. Therefore, it would probably be wise to leave some cushion with regard to the amount of money raised and the amount of money needed.

**Flat Fee Categories**

- Any water right or claim that has a flow rate of less than 35 gpm or less than 56.35 ac ft (the equivalent of 35 gpm) is assessed a flat fee of $5. The amount of 35 gpm was chosen because, based on statute, a person that is putting in a well that is less than or equal to 35 gpm is issued a certificate by DNRC without any DNRC review. Therefore, this seemed an appropriate number to use.

- Anything without a flow rate and without a volume is assessed a flat fee of $5. The question arises how a water right can be decreed without a flow rate and/or a volume. In some instances, such as stock, a standard is applied. For stock the standard is 30 gallons per day per animal unit. In our evaluations, it became quite clear how important volume is for certain types of beneficial uses because it is almost always the controlling factor. I have provided an example of a water right that has flow rate and a volume and one that has a flow rate and no volume and the total amount of water that can be used (assuming that they have used this amount historically).

| **Water Right A** | Flow Rate | Volume | Period of Use | # of Days of use at 100 gpm before reaching maximum volume (gpm/226.67=af/day) |
|---|---|---|---|---|
| | 100 gpm | 50 ac ft | Year around | 113.6 days |
| | | | | |
| **Water Right B** | Flow Rate | Volume | Period of Use | # of Days of use at 100 gpm before reaching maximum volume (gpm/226.67=af/day) |
| | 100 gpm | None decreed | Year around | 365 days |

- Anything with a flow rate of greater than 35 gpm but less than 56.35 acre feet is assessed a flat fee of $5. This is because volume is the limiting factor.

- Anything with no flow rate and a volume less than 56.35 acre feet is assessed a flat fee of $5. Without a flow rate you are forced to use the 56.35 acre feet cut off that we set for "flat fees".

- Anything with a flow rate of less than 35 gpm and no volume is assessed a flat fee of $5. Without a volume you are forced to use the 35 gpm cut off that we set for "flat fees".

**Variable Fee Categories**

In an effort to be as fair as possible, the variable fee is calculated based on the lesser of the flow or volume. The variable fees that are assigned for the purposes of this paper are $.016/gpm and $.01/ac ft. These numbers were calculated so that no matter whether you used acre feet or volume you would get close to the same number. For example at 36 gpm (above the 35 gpm cut off for the flat fee) and at 57 ac ft (above the 56.35 ac ft cut off for the flat fee) the following would be the income from the fee.

36 gpm X **$.016** = $.576
57 ac ft X **$.01** = $.57

As you can see, there is a point where volume or the flow rate is greater than the cut off for the flat fee but the claimant ends up paying less than the flat fee. Therefore, each claimant will pay a minimum of $5. If their fee calculation is more than $5 they will pay that fee. These numbers can be refined even more at direction from the committee.

- Anything with a flow rate greater than 35 gpm and a volume greater than 56.35 ac ft is assessed a variable fee. The amount that this would raise is reflected in the table showing the amount of funds raised. It is up to the Council to determine whether flow rate or volume will be used for the fee assessment.

- Anything with a flow rate of less than 35 gpm and a volume greater than 56.35 ac ft is assessed a variable fee. This fee is based on the volume as that is the limiting factor.

- Anything without a flow rate and a volume greater than 56.35 ac ft is assessed a variable fee. This fee is based on the volume as that is the limiting factor.

- Anything with a flow rate greater than 35 gpm and no volume is assessed a variable fee. This fee is based on flow rate.

- If the beneficial use is irrigation the fee is variable based on acreage. Irrigation poses a unique problem. Irrigation claims are not decreed with a volume, unless it is for water spreading, and only reflect a flow rate. By not having a volume, the period of use can not be taken into account (May 1 - Sept 15 for example vs. year around). The case also often exists where there are numerous water rights claims or water rights that are used to water the same acreage (also referred to as supplemental). Therefore, the only consistent and fair way to assess the fee was to use acreage. DNRC used GIS to determine the amount of acres irrigated in the state.

**Summary of all categories (excluding irrigation) and the type of fee**

| Flow Rate | Volume | Fee Type |
|---|---|---|
| Less than 35 gpm | Less than 56.35 ac ft | Flat |
| Greater than 35 gpm | Greater than 56.35 ac ft | Variable (Flow or Volume) |
| Greater than 35 gpm | Less than 56.35 ac ft | Flat (volume is controlling) |
| Less than 35 gpm | Greater than 56.35 ac ft | Variable (volume is controlling) |
| No Flow Rate | Greater than 56.35 ac ft | Variable (volume is controlling) |
| No Flow Rate | Less than 56.35 ac ft | Flat |
| Less than35 gpm | No Volume | Flat |
| Greater than 35 gpm | No Volume | Variable |
| No Flow | No Volume | Flat (?) |

**Revenue generated through the variable fee system**

The information that was used to compile the simplified tables that follow is incredibly complex and detailed. In an effort to make it as simple for the Council as possible and to not confuse the issue with the minutia of the Excel tables that were used to develop the end results, I haven't attached them. If you would like a copy of those tables so that you can understand exactly what all of the numbers are based on, please contact me and I'll e-mail them to you.

I will have the Excel table up during the EQC meeting so that the Council can manipulate numbers as you wish and you can see the impact on the bottom line when you do so. We will walk through how the numbers were arrived at during the meeting as well.

If you have questions, please do not hesitate to contact me at: 444-1640 or kevans@mt.gov

# Example 1: Based on Flow for > 35 GPM & >56 AF

| Total Revenue | $11,245,724 |
|---|---|

## Decisions

| | |
|---|---|
| Set minimum fee: | $5.00 |
| Set fee for less restricted users based on flow or volume: | Flow |
| Set fee based on GPM: | $0.016 |
| Set fee based on AF: | $0.010 |
| Set irrigation fee based on acres: | $0.50 |

Assumptions

Irrigated acres: 4,000,000

| | Purpose | Water Right Count | Revenue | Percent of Total Rev. |
|---|---|---|---|---|
| 1 | Agricultural Spraying | 324 | $1,620 | 0.014% |
| 2 | Augmentation | 1 | 5 | 0.000% |
| 3 | Commercial | 4,320 | 40,628 | 0.361% |
| 4 | Domestic | 89,982 | 467,655 | 4.159% |
| 5 | Erosion Control | 53 | 388 | 0.003% |
| 6 | Fire Protection | 385 | 3,162 | 0.028% |
| 7 | Fish and Wildlife | 2,582 | 1,135,302 | 10.095% |
| 8 | Fish Raceways | 116 | 9,905 | 0.088% |
| 9 | Fishery | 591 | 19,404 | 0.173% |
| 10 | Flood Control | 19 | 1,989 | 0.018% |
| 11 | Flow Through Fish Pond | 2 | 6 | 0.000% |
| 12 | Geothermal | 67 | 409 | 0.004% |
| 13 | Geothermal Heating | 56 | 251 | 0.002% |
| 14 | Industrial | 1,141 | 23,978 | 0.213% |
| 15 | Institutional | 277 | 1,511 | 0.013% |
| 16 | Irrigation | 60,162 | 2,000,000 | 17.785% |
| 17 | Lawn and Garden | 38,924 | 194,372 | 1.728% |
| 18 | Mining | 1,399 | 26,092 | 0.232% |
| 19 | Multiple Domestic | 2,450 | 12,197 | 0.108% |
| 20 | Municipal | 1,094 | 89,545 | 0.796% |
| 21 | Navigation | 6 | 71,833 | 0.639% |
| 22 | Observation and Testing | 35 | 328 | 0.003% |
| 23 | Oil Well Flooding | 88 | 343 | 0.003% |
| 24 | Other Purpose | 229 | 35,736 | 0.318% |
| 25 | Pollution Abatement | 42 | 2,909 | 0.026% |
| 26 | Power Generation | 295 | 3,260,654 | 28.995% |
| 27 | Power Generation, Nonconsumptive | 0 | 0 | 0.000% |
| 28 | Recreation | 806 | 253,662 | 2.256% |
| 29 | Sale | 13 | 5,774 | 0.051% |
| 30 | Sediment Control | 29 | 203 | 0.002% |
| 31 | Stock | 137,982 | 2,782,087 | 24.739% |
| 32 | Storage | 24 | 789,837 | 7.023% |
| 33 | Unknown | 169 | 8,606 | 0.077% |
| 34 | Waterfowl | 4 | 123 | 0.001% |
| 35 | Wildlife | 261 | 1,296 | 0.012% |
| 36 | Wildlife/Waterfowl | 372 | 3,915 | 0.035% |
| | Totals | 344,300 | $11,245,724 | 100.000% |

# Example 2: Based on Volume for > 35 GPM & >56 AF

| Total Revenue | $7,955,868 |
|---|---|

## Decisions

| | |
|---|---|
| Set minimum fee: | $5.00 |
| Set fee for less restricted users based on flow or volume: | Volume |
| Set fee based on GPM: | $0.016 |
| Set fee based on AF: | $0.010 |
| Set irrigation fee based on acres: | $0.50 |

Assumptions

Irrigated acres: 4,000,000

| | Purpose | Water Right Count | Revenue | Percent of Total Rev. |
|---|---|---|---|---|
| 1 | Agricultural Spraying | 324 | $1,620 | 0.020% |
| 2 | Augmentation | 1 | 5 | 0.000% |
| 3 | Commercial | 4,320 | 30,920 | 0.389% |
| 4 | Domestic | 89,982 | 500,833 | 6.295% |
| 5 | Erosion Control | 53 | 267 | 0.003% |
| 6 | Fire Protection | 385 | 2,909 | 0.037% |
| 7 | Fish and Wildlife | 2,582 | 273,724 | 3.441% |
| 8 | Fish Raceways | 116 | 5,303 | 0.067% |
| 9 | Fishery | 591 | 18,912 | 0.238% |
| 10 | Flood Control | 19 | 1,853 | 0.023% |
| 11 | Flow Through Fish Pond | 2 | 6 | 0.000% |
| 12 | Geothermal | 67 | 354 | 0.004% |
| 13 | Geothermal Heating | 56 | 289 | 0.004% |
| 14 | Industrial | 1,141 | 12,802 | 0.161% |
| 15 | Institutional | 277 | 1,364 | 0.017% |
| 16 | Irrigation | 60,162 | 2,000,000 | 25.139% |
| 17 | Lawn and Garden | 38,924 | 194,176 | 2.441% |
| 18 | Mining | 1,399 | 9,775 | 0.123% |
| 19 | Multiple Domestic | 2,450 | 89,835 | 1.129% |
| 20 | Municipal | 1,094 | 9,896 | 0.124% |
| 21 | Navigation | 6 | 72,425 | 0.910% |
| 22 | Observation and Testing | 35 | 328 | 0.004% |
| 23 | Oil Well Flooding | 88 | 342 | 0.004% |
| 24 | Other Purpose | 229 | 35,705 | 0.449% |
| 25 | Pollution Abatement | 42 | 2,665 | 0.033% |
| 26 | Power Generation | 295 | 3,032,200 | 38.113% |
| 27 | Power Generation, Nonconsumptive | 0 | 0 | 0.000% |
| 28 | Recreation | 806 | 125,243 | 1.574% |
| 29 | Sale | 13 | 2,918 | 0.037% |
| 30 | Sediment Control | 29 | 132 | 0.002% |
| 31 | Stock | 137,982 | 727,522 | 9.144% |
| 32 | Storage | 24 | 789,730 | 9.926% |
| 33 | Unknown | 169 | 8,549 | 0.107% |
| 34 | Waterfowl | 4 | 21 | 0.000% |
| 35 | Wildlife | 261 | 1,296 | 0.016% |
| 36 | Wildlife/Waterfowl | 372 | 1,945 | 0.024% |
| | Totals | 344,300 | $7,955,868 | 100.000% |

**Benefits**

- By imposing a fee based on what was claimed with regard to flow rate or volume the fee may help with addressing any issues associated with accuracy. For example, if a claimant claimed 600 gpm then they will be assessed a fee based on that flow rate. If in reality the claimant is only using 400 gpm, the fee may be enough of an incentive for that claimant to come into the DNRC and have their water right adjusted.
- All water users in the state will be required to pay -- one or two water user groups will not have to pay at their own expense and for the benefit of the whole
- Reduces the need for general fund and state special revenue fund appropriations (approximately $2 Million per year)
- Based on commitments made to the Council by both the DNRC and the Water Court, the adjudication would be completed in 15 years.

**Costs**

- Potential political costs with regard to imposing a new fee on constituents

**Decisions Time**

- How will fees that are not paid be addressed?
  Options:
  (1) Collect as delinquent through DOR
  (2) Forfeiture of water right
  (3) Others
- Fee for beneficial uses that are not decreed with a flow rate or a volume?
- Date on which the fee will be assessed
- The actual fee amount for each user group (if different than that provided in this paper)
- One time fee or an annual fee?
  Options:
  (1) One time fee would necessarily have to be a higher fee rate. Money in the fund would be statutorily protected.
  (2) Annual fee distributed annually to the appropriate adjudication element
  (3) After the adjudication is completed -- maintain fee for other water resource needs in Montana or end fee?
- If a claimant or a water right holder reduces their water right or claim after they have received their fee statement -- will they be able to reduce their payment for that year?

For example: A claimant has a water right that has no flow and has a volume of greater than 56.35 acre feet. The water right is for 1000 acre feet -- based on the attached table, the fee would be $10.00. The claimant realizes that he only uses 600 acre feet per year. The claimant goes into DNRC and asks them to adjust his water right to reflect the reduced acre feet per year. The claimant's fee would now be $6. How does this "new" fee amount get to Department of Revenue?

Options:

(1) DNRC gives the claimant some type of certification to return with their new fee amount to DOR?

(2) The Water Court provides some type of certification?

- How much of a safety margin is needed with regard to the revenue generated vs. the revenue needed to complete the adjudication?
- How much does the Council want to assess per acre for irrigation?