Notice of Intent (NOI-31) Instructions General Permit for Produced Water MTG310000

The NOI-31 form must be completed by the owner/operator of a produced water activity eligible for coverage under DEQ's *Produced Water General Permit*. Corresponding documents and related forms are available on the DEQ website at: <u>http://deq.mt.gov/water/resources/Forms</u> or from DEQ by calling (406) 444-5546. *Do not use this form to transfer permit coverage to a new owner or operator. For a permit transfer you must use Form PTN*.

You must provide a complete NOI-31 package before DEQ can authorize your proposed activity. Please type or print legibly; applications that are not legible or are not complete will be returned. Responses must be self-explanatory and must not refer exclusively to attached maps, plans, or documents. You must maintain a copy of the General Permit and completed NOI-31 Form for your records. The completed NOI-31 form and fee can be submitted online or mailed as follows:

- Online Submission: Fees, Applications, and Compliance Tracking System (FACTS) at http://deq.mt.gov/Public/FACTS
- Mail-in Submission: Montana Department of Environmental Quality, Water Protection Bureau, PO Box 200901 Helena, MT 59620-0901

SPECIFIC ITEM INSTRUCTIONS

Section A – NOI-31 Status and Fee

1. Select Appropriate Fee: Select the appropriate fee:

- New Application: Check this box if this is the first NOI-31 submission for this operation under the General Permit.
- Renewal Application: Check this box if your operation is currently covered under the 2015-General Permit.
- Permit Coverage Modification: Check this box if there is a change in the operation or site information. (This does not apply to permit transfers.)

2. Provide Permit Number: Provide your MPDES-assigned permit number.

- Leave blank if this is your first NOI-31 submission under the 2021-General Permit. DEQ will assign a permit number.
- If you were covered under the 2015-General Permit, provide your MPDES permit number that begins with MTG31.

Section B – Applicant (Owner/Operator) Information

The permit will be issued to the entity identified in this section. The owner/operator assumes all liability for discharges from the site and compliance with the terms and conditions of the General Permit and applicable regulations. If the owner/operator is other than an individual or government entity, it must be registered with the Montana Secretary of State's office.

- Organizational Formal Name: Give the name, as it is legally referred to, of the business, public organization, or other entity that owns, operates, controls or supervises the site or activity described in Section D of this form.
- Signatory/Responsible Official (Name, Title): The signatory/responsible official must meet certification requirements in Section I of the NOI:
 - For a corporation, by a principal officer of at least the level of vice president;
 - o For a partnership or sole proprietorship, by a general partner of the proprietor, respectively; or
 - For a municipality, state, federal, or other public facility, by either a principal executive officer or ranking elected official.

Section C – Authorized Representative

1. Select whether an authorized representative is designated for this operation. If not, skip to Section D.

2. Authorized Representative: All reports including electronic Discharge Monitoring Reports (NetDMRs) may be signed by a duly authorized representative. A person is a duly authorized representative only if:

- The authorization is made in writing by the signatory/responsible official;
- The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company (a duly authorized representative may thus be either a named individual or any individual occupying a named position); and
- The written authorization is submitted to DEQ.

Any signatory or authorized representative shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

The signatory/responsible official can duly authorize the person identified as an authorized representative or another individual or position name. If the signatory/responsible official does not duly authorize anyone, all correspondence must come from him/her until a written designation is submitted to DEQ. In the future, if the authorization made in this NOI is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new written delegation of authorization, including a written letter satisfying the requirements above, must be submitted to DEQ prior to or together with any reports, information, or applications to be signed by an authorized representative.

Section D – Facility/Site Information

1. Facility Information

- Facility Name: Identify the name of the facility or activity at this site that is the source of produced water discharge.
- Location: This describes the specific area/location where the activity will be physically conducted. The operation site location description may be a physical address or description of how the site may be accessed. PO Boxes are not acceptable. If the street address is not available, include the nearest intersection or other identifying information.
- Nearest City or Town, Zip Code, County: This is the city or town that is closest to the operation site.
- Latitude, Longitude: Latitude and longitude coordinates must be accurate. DEQ prefers the location be specified in decimal degrees, accurate to the fourth decimal place. If the preferred decimal degrees are not used, then the coordinates must be provided in degrees, minutes, and seconds, accurate to the nearest second. Geographic information may be obtained at http://nris.msl.mt.gov/.
- Located Within Indian Country: Indicate if the operation covered under this NOI-31 will occur on in Indian Country. This Permit applies to all areas of the State of Montana, except for Indian Reservations, which are permitted by EPA.

2. Standard Industrial Classification (SIC) Codes and North American Industry Classification System (NAICS)

Codes – List in descending order of significance, the SIC codes AND NAICS codes that best describes your facility in terms of the principal products or services you produce or provide. Indicate only one code in the space provided in each box (i.e., only one primary SIC code). At least one SIC code and one NAICS code must be provided. If there are SIC and NAICS codes for another activity, then list those codes in box (2).

• SIC Codes and conversions from the newer North American Industry Classification System can be found at http://www.osha.gov/pls/imis/sicsearch.html and https://www.census.gov/naics/.

Section E – Facility Description

1. Nature of proposed operation: General Permit coverage is only applicable to produced water discharges from oil and gas operations.

2. Describe the proposed operation: Provide the total discharge rate in gallons per minute (gpm). Specify whether discharge is continuous or intermittent. If the operation is intermittent, explain the intermittent discharge. Identify the source of the produced water and describe the treatment process.

3. Attach a facility diagram. Include a detailed layout of the facility, treatment processes, and movement of produced water through the facility. Identify each outfall location and where effluent monitoring will take place after treatment and before entering the constructed impoundment or ephemeral drainage.

4. Attach a map: Attach a topographic map extending at least one mile beyond property boundaries of the site of the operation. Illustrate the operation boundaries, receiving water, and major drainage patterns. If you are discharging to an impoundment, indicate the boundaries and area (acres) of the impoundment.

• NOI-31 forms submitted with incomplete or illegible maps will be considered incomplete and returned with instructions to provide an appropriate map.

5. Chemical Additives Disclosure: If any part of the facility or lease uses chemicals or additives, then attach a list of those used. Also describe the chemical additives used in the operation and treatment to the extent that such information is obtainable after making inquiries to suppliers: all chemical additives, their trade names, purposes, supplier, CAS number, concentrations, and amounts. A Safety Data Sheet (SDS) is acceptable for submission if it contains the required information.

6. Stream Classification: refer to <u>Administrative Rules of Montana 17.30.601-670</u> to determine if your proposed operation is in a stream classified as A-1 or A-Closed.

7. Sage Grouse Habitat: Visit <u>https://sagegrouse.mt.gov/</u> to determine if the proposed operation is located in designated sage grouse core, general, or connectivity habitat. If it is, then you will need to submit an application to the Montana Sage Grouse Habitat Conservation Program and obtain a consultation letter from the Program. Include the consultation letter with your NOI-31 submission. For more information, call (406)444-1467 or (406)444-2613.

8. New Source: This section must be completed if your oil and gas facility is not yet permitted or does not yet exist and will be constructed and initiating operation.

- Contact the Montana Natural Heritage Program (MNHP), <u>http://mtnhp.org/</u> and request a project review for the proposed sand operation. Attach the MNHP analysis to the NOI Form.
- Contact the Montana State Historic Preservation Office (SHPO), <u>http://mhs.mt.gov/shpo/</u> and request a project review for the proposed operation. Attach the SHPO analysis to the NOI Form.

9. Discharge Status: If you are currently discharging, provide the date discharge began. If you are not discharging, provide the most recent discharge dates and the projected discharge dates. If you have never discharged, put NA in the most recent discharge dates section.

Section F - Outfall, Receiving Water, and Impoundment

1. Waters of the United States Certification:

- By selecting 'No', you are certifying that your discharge will reach waters of the United States, please contact DEQ regarding permit coverage.
- By selecting Yes, you are certifying that your discharge will <u>not</u> reach waters of the United States. This means that you are certifying that no discharge will reach tributaries; lakes and pounds, and impoundments of jurisdictional waters; and adjacent wetlands, as defined in 40 CFR 120.
- Describe the actions taken to ensure the discharge will not reach waters of the United States.

2. Identify the receiving water(s) where produced water will be discharged:

- Outfall Number: An outfall is a discrete channel, conveyance, structure, or flow path from which produced water discharge leaves the facility, before entering the receiving water and after all treatment. For renewals, use the outfall number(s) specified in the current authorization. For new projects list all outfalls starting with 001. Attach additional sheets if necessary for more outfalls.
- Latitude and Longitude: Provide accurate coordinates for each outfall. DEQ prefers coordinates be reported in decimal degrees, accurate to the fourth decimal place. Latitude and longitude can be obtained at https://mslservices.mt.gov/Geographic_Information/Applications/DigitalAtlas/.
- Receiving Water Name: If the receiving water/drainage is unnamed, indicate the closest named drainage it flows into (for example, "unnamed tributary to Clear Creek").
- Average Discharge Rate into Outfall: State the average discharge rate into each outfall in gallons per minute (gpm)
- Total Discharge Rate: Provide the sum of all outfall discharge rates. If there is only one outfall, report the total discharge rate as the average discharge rate.
- Discharge Volume: Multiply the total discharge rate by a conversion factor of 1.61 to determine volume in acre-feet.

3. Select the type of discharge that describes your proposed operation:

- By selecting that your operation discharges to an ephemeral drainage with no impoundment, you are certifying that no discharge of produced water to waters of the United States will occur. Provide the name of the nearest downstream intermittent or perennial waterbody and its distance from the operation. Facilities with discharge that will reach waters of the United States should apply for individual permit coverage.
- If your operation discharges to an impoundment constructed in an ephemeral drainage, continue to Section F.4 below.

4. Provide the area, depth, and volume of the impoundment:

- When proposing an <u>existing</u> impoundment for produced water storage conduct a facility visit or land survey, if necessary, to determine the total area and average depth of the impoundment.
- When proposing a <u>new</u> impoundment Consult Appendix A to estimate the necessary area and average depth of an impoundment based on the acre-foot volume of discharge (calculated in Section F.2). Next, consult a topographical map, or visit the facility, and/or conduct a field survey to establish an appropriate impoundment site based on the needed area and average depth from the previous step. Once an appropriate impoundment site has been established, record the impoundment area and average depth.
- To calculate impoundment volume multiply the impoundment area (acres) by the impoundment depth (ft)

Section G - Produced Water Storage Capacity Self-Evaluation

1. Convert the local annual average precipitation to volume in acre-ft: First convert the average annual precipitation from inches to feet by dividing by 12. To convert annual average precipitation to volume (acre-ft), multiply the calculated annual precipitation (feet) by the surface acreage of the impoundment (acres).

2. Determine annual Class A pan evaporation loss in volume. Use Appendix B to determine the Class A pan evaporation for your area, then convert it from inches to feet by dividing by 12. Finally, to calculate the evaporation loss in volume (acre-ft), multiply the evaporation loss (feet) by the surface acreage of the impoundment (acres).

3. Complete the water balance calculation to determine the required annual storage volume: In the equation, enter the water balance components calculated in Steps F.4, G.1, and G.2.

4. Certify that the impoundment storage capacity is adequate to contain the produced water discharge. Compare the impoundment volume from Section F.4 to the required annual storage volume from Section G.3. If the impoundment volume is greater than the storage volume, storage capacity is adequate. If the impoundment volume is less than the storage volume, the storage capacity is inadequate, and the final location and boundary of the impoundment must be identified and indicated on your attached map (from section E.4). If you are unable to find enough storage capacity for your discharge, you may apply for an individual MPDES permit.

Section H – Water Quality Analysis for Wildlife and Livestock Drinking Water

1. Attach a water quality analysis of the proposed discharge meeting the criteria for livestock and wildlife drinking water in the table below: Applicants seeking coverage under the PWGP must conduct a water quality analysis of the produced water proposed to be discharged to ensure the water meets the water quality requirements established in the PWGP. The analysis must be done in accordance with EPA test procedures (40 CFR Part 136). Sample for each parameter listed in the Livestock and Wildlife Drinking Water Criteria table, ensuring the watering criteria maximum concentration in the table is not exceeded. Samples that are reported as nondetect must meet the required reporting value (RRV) from Circular DEQ-7.

• Include the lab analysis with the NOI package. The collection date on the analysis must not be more than 1 year old. If a new well has been proposed, or an existing well is shut down, DEQ will accept an anticipated water quality analysis from a nearby well or similar source, but applicants must submit a new water quality analysis within 3 months of initial discharge.

2. Certify that the proposed produced water discharge meets water quality requirements and will be put to the beneficial use of providing drinking water for livestock and wildlife. If the proposed discharge does not meet water quality requirements or will not be put to beneficial use, then apply for individual permit coverage.

Section I - Certification

Certification must be completed by the signatory (owner/operator) responsible for the authorization as identified in Section B and descried in ARM 17.30.1323. This is certification that the applicant will comply with the terms and conditions of the General Permit.

Discharge									Impour	-		-	J					
A: Rate	B: Annual	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
A: Kate (gpm)	volume	Impounded Depth (feet)													1			
	(acre-feet)	1.6	0.0	0.5	0.4	0.2	0.2		-	-			0.1	0.1	0.1	0.1	0.1	0.1
1	2	1.6 3.2	0.8	0.5	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
2	3		1.6	1.1			0.5					0.3			0.2		0.2	0.2
3	5	4.8	2.4	1.6	1.2	1.0	0.8	0.7	0.6	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3
4	6	6.4	3.2	2.1	1.6	1.3	1.1	0.9	0.8	0.7	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4
5	8	8.1	4.0	2.7	2.0	1.6	1.3	1.2	1.0	0.9	0.8	0.7	0.7	0.6	0.6	0.5	0.5	0.5
6	10	9.7	4.8	3.2	2.4	1.9	1.6	1.4	1.2	1.1	1.0	0.9	0.8	0.7	0.7	0.6	0.6	0.6
7	11	11.3	5.6	3.8	2.8	2.3	1.9	1.6	1.4	1.3	1.1	1.0	0.9	0.9	0.8	0.8	0.7	0.7
8	13	12.9	6.4	4.3	3.2	2.6	2.1	1.8	1.6	1.4	1.3	1.2	1.1	1.0	0.9	0.9	0.8	0.8
9	14	14.5	7.2	4.8	3.6	2.9	2.4	2.1	1.8	1.6	1.4	1.3	1.2	1.1	1.0	1.0	0.9	0.9
10	16	16.1	8.1	5.4	4.0	3.2	2.7	2.3	2.0	1.8	1.6	1.5	1.3	1.2	1.2	1.1	1.0	0.9
11	18	17.7	8.9	5.9	4.4	3.5	3.0	2.5	2.2	2.0	1.8	1.6	1.5	1.4	1.3	1.2	1.1	1.0
12	19	19.3	9.7	6.4	4.8	3.9	3.2	2.8	2.4	2.1	1.9	1.8	1.6	1.5	1.4	1.3	1.2	1.1
13	21	20.9	10.5	7.0	5.2	4.2	3.5	3.0	2.6	2.3	2.1	1.9	1.7	1.6	1.5	1.4	1.3	1.2
14	23	22.5	11.3	7.5	5.6	4.5	3.8	3.2	2.8	2.5	2.3	2.0	1.9	1.7	1.6	1.5	1.4	1.3
15	24	24.2	12.1	8.1	6.0	4.8	4.0	3.5	3.0	2.7	2.4	2.2	2.0	1.9	1.7	1.6	1.5	1.4
16	26	25.8	12.9	8.6	6.4	5.2	4.3	3.7	3.2	2.9	2.6	2.3	2.1	2.0	1.8	1.7	1.6	1.5
17	27	27.4	13.7	9.1	6.8	5.5	4.6	3.9	3.4	3.0	2.7	2.5	2.3	2.1	2.0	1.8	1.7	1.6
18	29	29.0	14.5	9.7	7.2	5.8	4.8	4.1	3.6	3.2	2.9	2.6	2.4	2.2	2.1	1.9	1.8	1.7
19	31	30.6	15.3	10.2	7.6	6.1	5.1	4.4	3.8	3.4	3.1	2.8	2.5	2.4	2.2	2.0	1.9	1.8
20	32	32.2	16.1	10.7	8.1	6.4	5.4	4.6	4.0	3.6	3.2	2.9	2.7	2.5	2.3	2.1	2.0	1.9
21	34	33.8	16.9	11.3	8.5	6.8	5.6	4.8	4.2	3.8	3.4	3.1	2.8	2.6	2.4	2.3	2.1	2.0
22	35	35.4	17.7	11.8	8.9	7.1	5.9	5.1	4.4	3.9	3.5	3.2	3.0	2.7	2.5	2.4	2.2	2.1
23	37	37.0	18.5	12.3	9.3	7.4	6.2	5.3	4.6	4.1	3.7	3.4	3.1	2.8	2.6	2.5	2.3	2.2
24	39	38.6	19.3	12.9	9.7	7.7	6.4	5.5	4.8	4.3	3.9	3.5	3.2	3.0	2.8	2.6	2.4	2.3
25	40	40.3	20.1	13.4	10.1	8.1	6.7	5.8	5.0	4.5	4.0	3.7	3.4	3.1	2.9	2.7	2.5	2.4
26	42	41.9	20.9	14.0	10.5	8.4	7.0	6.0	5.2	4.7	4.2	3.8	3.5	3.2	3.0	2.8	2.6	2.5
27	43	43.5	21.7	14.5	10.9	8.7	7.2	6.2	5.4	4.8	4.3	4.0	3.6	3.3	3.1	2.9	2.7	2.6
28	45	45.1	22.5	15.0	11.3	9.0	7.5	6.4	5.6	5.0	4.5	4.1	3.8	3.5	3.2	3.0	2.8	2.7
29	47	46.7	23.3	15.6	11.7	9.3	7.8	6.7	5.8	5.2	4.7	4.2	3.9	3.6	3.3	3.1	2.9	2.7
30	48	48.3	24.2	16.1	12.1	9.7	8.1	6.9	6.0	5.4	4.8	4.4	4.0	3.7	3.5	3.2	3.0	2.8
31	50	49.9	25.0	16.6	12.5	10.0	8.3	7.1	6.2	5.5	5.0	4.5	4.2	3.8	3.6	3.3	3.1	2.9
32	52	51.5	25.8	17.2	12.9	10.3	8.6	7.4	6.4	5.7	5.2	4.7	4.3	4.0	3.7	3.4	3.2	3.0
33	53	53.1	26.6	17.7	13.3	10.6	8.9	7.6	6.6	5.9	5.3	4.8	4.4	4.1	3.8	3.5	3.3	3.1
34	55	54.7	27.4	18.2	13.7	10.9	9.1	7.8	6.8	6.1	5.5	5.0	4.6	4.2	3.9	3.6	3.4	3.2
35	56	56.4	28.2	18.8	14.1	11.3	9.4	8.1	7.0	6.3	5.6	5.1	4.7	4.3	4.0	3.8	3.5	3.3
36	58	58.0	29.0	19.3	14.5	11.6	9.7	8.3	7.2	6.4	5.8	5.3	4.8	4.5	4.1	3.9	3.6	3.4

NOI-31 Appendix A: Estimating Impoundment Capacity Look-up Table

Discharge									U		a (acre)-			I				
A: Rate	B: Annual	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	volume								Impour	dod Don	th (feet)-							
(gpm)	(acre-feet)								-	-	· · · · ·							
37	60	59.6	29.8	19.9	14.9	11.9	9.9	8.5	7.4	6.6	6.0	5.4	5.0	4.6	4.3	4.0	3.7	3.5
38	61	61.2	30.6	20.4	15.3	12.2	10.2	8.7	7.6	6.8	6.1	5.6	5.1	4.7	4.4	4.1	3.8	3.6
39	63	62.8	31.4	20.9	15.7	12.6	10.5	9.0	7.8	7.0	6.3	5.7	5.2	4.8	4.5	4.2	3.9	3.7
40	64	64.4	32.2	21.5	16.1	12.9	10.7	9.2	8.1	7.2	6.4	5.9	5.4	5.0	4.6	4.3	4.0	3.8
41	66	66.0	33.0	22.0	16.5	13.2	11.0	9.4	8.3	7.3	6.6	6.0	5.5	5.1	4.7	4.4	4.1	3.9
42	68	67.6	33.8	22.5	16.9	13.5	11.3	9.7	8.5	7.5	6.8	6.1	5.6	5.2	4.8	4.5	4.2	4.0
43	69	69.2	34.6	23.1	17.3	13.8	11.5	9.9	8.7	7.7	6.9	6.3	5.8	5.3	4.9	4.6	4.3	4.1
44	71	70.8	35.4	23.6	17.7	14.2	11.8	10.1	8.9	7.9	7.1	6.4	5.9	5.4	5.1	4.7	4.4	4.2
45	72	72.5	36.2	24.2	18.1	14.5	12.1	10.4	9.1	8.1	7.2	6.6	6.0	5.6	5.2	4.8	4.5	4.3
46	74	74.1	37.0	24.7	18.5	14.8	12.3	10.6	9.3	8.2	7.4	6.7	6.2	5.7	5.3	4.9	4.6	4.4
47	76	75.7	37.8	25.2	18.9	15.1	12.6	10.8	9.5	8.4	7.6	6.9	6.3	5.8	5.4	5.0	4.7	4.5
48	77	77.3	38.6	25.8	19.3	15.5	12.9	11.0	9.7	8.6	7.7	7.0	6.4	5.9	5.5	5.2	4.8	4.5
49	79	78.9	39.4	26.3	19.7	15.8	13.1	11.3	9.9	8.8	7.9	7.2	6.6	6.1	5.6	5.3	4.9	4.6
50	81	80.5	40.3	26.8	20.1	16.1	13.4	11.5	10.1	8.9	8.1	7.3	6.7	6.2	5.8	5.4	5.0	4.7
51	82	82.1	41.1	27.4	20.5	16.4	13.7	11.7	10.3	9.1	8.2	7.5	6.8	6.3	5.9	5.5	5.1	4.8
52	84	83.7	41.9	27.9	20.9	16.7	14.0	12.0	10.5	9.3	8.4	7.6	7.0	6.4	6.0	5.6	5.2	4.9
53	85	85.3	42.7	28.4	21.3	17.1	14.2	12.2	10.7	9.5	8.5	7.8	7.1	6.6	6.1	5.7	5.3	5.0
54	87	86.9	43.5	29.0	21.7	17.4	14.5	12.4	10.9	9.7	8.7	7.9	7.2	6.7	6.2	5.8	5.4	5.1
55	89	88.6	44.3	29.5	22.1	17.7	14.8	12.7	11.1	9.8	8.9	8.1	7.4	6.8	6.3	5.9	5.5	5.2
56	90	90.2	45.1	30.1	22.5	18.0	15.0	12.9	11.3	10.0	9.0	8.2	7.5	6.9	6.4	6.0	5.6	5.3
57	92	91.8	45.9	30.6	22.9	18.4	15.3	13.1	11.5	10.2	9.2	8.3	7.6	7.1	6.6	6.1	5.7	5.4
58	93	93.4	46.7	31.1	23.3	18.7	15.6	13.3	11.7	10.4	9.3	8.5	7.8	7.2	6.7	6.2	5.8	5.5
59	95	95.0	47.5	31.7	23.7	19.0	15.8	13.6	11.9	10.6	9.5	8.6	7.9	7.3	6.8	6.3	5.9	5.6
60	97	96.6	48.3	32.2	24.2	19.3	16.1	13.8	12.1	10.7	9.7	8.8	8.1	7.4	6.9	6.4	6.0	5.7
61	98	98.2	49.1	32.7	24.6	19.6	16.4	14.0	12.3	10.9	9.8	8.9	8.2	7.6	7.0	6.5	6.1	5.8
62	100	99.8	49.9	33.3	25.0	20.0	16.6	14.3	12.5	11.1	10.0	9.1	8.3	7.7	7.1	6.7	6.2	5.9
63	101	101.4	50.7	33.8	25.4	20.3	16.9	14.5	12.7	11.3	10.1	9.2	8.5	7.8	7.2	6.8	6.3	6.0
64	103	103.0	51.5	34.3	25.8	20.6	17.2	14.7	12.9	11.4	10.3	9.4	8.6	7.9	7.4	6.9	6.4	6.1
65	105	104.7	52.3	34.9	26.2	20.9	17.4	15.0	13.1	11.6	10.5	9.5	8.7	8.1	7.5	7.0	6.5	6.2
66	106	106.3	53.1	35.4	26.6	21.3	17.7	15.2	13.3	11.8	10.6	9.7	8.9	8.2	7.6	7.1	6.6	6.3
67	108	107.9	53.9	36.0	27.0	21.6	18.0	15.4	13.5	12.0	10.8	9.8	9.0	8.3	7.7	7.2	6.7	6.3
68	109	109.5	54.7	36.5	27.4	21.9	18.2	15.6	13.7	12.2	10.9	10.0	9.1	8.4	7.8	7.3	6.8	6.4
69	111	111.1	55.5	37.0	27.8	22.2	18.5	15.9	13.9	12.3	11.1	10.1	9.3	8.5	7.9	7.4	6.9	6.5
70	113	112.7	56.4	37.6	28.2	22.5	18.8	16.1	14.1	12.5	11.3	10.2	9.4	8.7	8.1	7.5	7.0	6.6
71	114	114.3	57.2	38.1	28.6	22.9	19.1	16.3	14.3	12.7	11.4	10.4	9.5	8.8	8.2	7.6	7.1	6.7
72	116	115.9	58.0	38.6	29.0	23.2	19.3	16.6	14.5	12.9	11.6	10.5	9.7	8.9	8.3	7.7	7.2	6.8

NOI-31 Appendix A: Estimating Impoundment Capacity Look-up Table

