

## State Engineer's Office

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## MEMORANDUM

DATE: April 4, 2018

TO: Surface Water Division

Board of Control Division

FROM: Patrick T. Tyrrell, State Engineer

SUBJECT: Beaver Dam Analog (BDA) Reservoir Permit Application

Process - 1.0

The Staff of the Surface Water Division was directed to determine a method by which multiple small BDA reservoirs could be permitted by filing one SW-3 application.

This method is intended to simplify the procedure for filing while maintaining the integrity of our records and our knowledge of facilities which are impounding water.

## Application/permitting requirements:

- 1. The permit shall be limited to no more than ten (10) individual structures not to exceed a maximum total volumetric capacity of 20.0 acre-feet. The group of reservoirs shall be located on the same source of supply and be in close proximity.
- 3. Use will be wetlands. Filing fee will be \$25.00 per application.
- 4. Each BDA reservoir shall be on the channel of an identified source.
- 5. The 1/4 location (or lot) and GPS coordinates shall be provided for each BDA reservoir. The location of the downstream-most BDA reservoir shall be listed in Item 5 of the SW-3 form. The location and GPS coordinates of additional BDA reservoirs shall be listed in the "Remarks" section of the SW-3 form.

- 6. Area and capacity data shall be provided for each BDA reservoir.
- 7. An SW-3A form will be used to provide typical details of each BDA reservoir and location in map form.
- 8. BDA reservoirs, by design, are limited life facilities. Permits issued for BDA reservoirs will be limited to a maximum term of ten (10) years and will contain an auto cancellation date reflecting same. If any BDA reservoir shall remain after the auto cancellation date, the appropriator shall file a new application for permit.

## Conditions/Limitations:

1. Due to typical BDA reservoir design, construction requirements regarding top of dam width, upstream and downstream slope ratios, and freeboard minimum shall be automatically waived. The permit shall contain the following limitation:

"Due to the nature of this facility and construction method, the minimum slope, top width, and freeboard requirements are hereby waived. Such waiver does not relieve the appropriator of responsibility for safety of operation of the reservoir or of liability in case of failure of the dam."

2. Typical BDA reservoir design does not include outlet works. The permit shall contain the following limitation:

"Since the plans show that no outlet works are contemplated, the State Engineer may require the later installation of necessary outlet works or construction of a by-pass ditch or other means, which will facilitate regulation."

- 3. No final proof of appropriation shall be accepted for this type of permit due to the anticipated limited life of the facilities.
- 4. Filing of "Notice of Completion of Construction" shall be required. Once the completion of construction notice is filed with the agency, a field inspection will be conducted by SEO field staff to verify number, sizes, capacity and other pertinent details of the filing.