## **ODFW Alternate Reservoir Application Review Sheet**

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This portion to be completed by the applicant.	
Applicant Name: Richard Drosman	
Address: 86 S 22 <sup>nd</sup> St, Saint Helens, OR 97051	
Phone/Email: <u>503-397-3358</u>	
Reservoir Name: Pond 1	Volume (AF): 7 AF
Source: seasonal springs/seeps, tributary to Beaver Creek	
Basin Name: Columbia	in-channel
Twp Rng Sec QQ: <u>7N4W3 SWSE</u>	⊠ off-channel
Note: It is unlikely that ODFW will be able to complete this form while you wait, appointment to submit the form so as to provide any necessary clarifications. See	
This portion to be completed by Oregon Department of Fish and	l Wildlife (ODFW) staff.
1) Is the proposed project and AO¹ off channel? (if yes then proceed to #4; if no then proceed to #2)	YES   NO*
*Based on a site visit, ODFW has determined that Pond 1 is located Beaver Creek.	on-channel on an unnamed tributary to
2) Is the proposed project or AO located where NMF <sup>2</sup> are or were hist (if yes then proceed to #3; if no then proceed to #4)	orically present?□ YES ⊠ NO
3) If NMF are or were historically present:	
a. Is there an ODFW-approved fish-passage plan?	
b. Is there an ODFW-approved fish-passage waiver or exemption?	YES □ NO
If fish passage is required under ORS 509.580 through .910, then eithe forward with the application. If responses to 3(a) and 3(b) are "No", the requirements of Oregon Fish Passage Law and shall not be constructed to the construction of the const	nen the proposed reservoir <u>does not meet</u>
4) Would the proposed project pose any other significant detrimental ilocally or downstream?	=
Explain below (for example, list STE species or other existing fisher negatively.)	ry resources that would be impacted
$\boxtimes$ Any diversion or appropriation of water for storage during the pe	
significant detrimental impact to existing fishery resources. (For	
during a certain time period would cause a significant detriment ODFW should recommend conditions or limitations.) If NMF fi	
AO = Artificial Obstruction means any dam, diversion, culvert or other human-r	nade device placed in waters of this state that

precludes or prevents the migration of native migratory fish. ORS 509.580 (1)

<sup>&</sup>lt;sup>2</sup> NMF = Native Migratory Fish Species in Oregon as defined by OAR 635 - 412 - 0005 (32)

of water di	applicant Name: Richard Drosman (Pond 1/R-89173)  ODFW Review of water diversion then the applicant should be advised that a fish screen consistent with screening criteria will be required.												
☐ This proposed pond or reservoir contemplates impounding water in the Columbia Basin above Bonneville Dam. ODFW has determined that additional diversions of water in this area pose a significant detrimental impact to existing fishery resources during the period April 15 through September 30.													
ESA-listed fish (fall Chinook, chum, coho, and winter steelhead), sensitive species (cutthroat trout), and other													
game fish are present in Beaver Creek and lower reaches of the unnamed tributary during the period of impact.													
Instream flows to fu	lfill MF 3 (C5	9614	), IS 70	)953 (0	C72500	)), and	IS 885	26 (C	94585)	for aq	uatic l	ife are	not
being met partially of	or wholly durii	ng the	perio	d of im	pact.	Based o	on para	ameter	s asses	sed by	ODFV	W, inst	ream
flows are currently	below those	essen	tial to	suppo	rt the	biologi	cal ne	eds of	an exi	isting f	fishery	resou	rce
during March - De	<u>cember.</u>												
In addition, Beaver	Creek is listed	by th	e Oreg	gon Dej	partme	nt of E	nviron	menta	l Qual	ity (OI	DEQ) ι	<u>inder</u>	
requirements of the	federal Clean	Wate	r Act fo	or Sect	ion 30	3(d) as	"Wate	er Qua	lity Liı	mited"	for ter	nperatı	are on
a year-round basis a	nd for biologic	cal cri	iteria, l	ooth of	which	cause	impair	ment	to exist	ting fis	hery re	esource	es.
ODEQ develops To	tal Maximum ]	<u>Daily</u>	Loads	(TMD	Ls) fo	r any w	ater b	ody th	at is w	ater qu	ality li	imited	with_
the goal of water qu	ality standards	bein	g met f	for the	basin.	In this	case,	the N	orth Co	oast TI	MDL h	as a de	fined
critical period for te	mperature whe	en lov	v flows	coinci	ide wit	h maxi	mum l	neat lo	ading,	which	results	s in hig	<u>th</u>
instream temperatures. Being on-channel, Pond 1 poses a detriment to stream temperatures by increasing the													
residence time that y	vater is expose	ed to	solar ra	adiation	n, affec	cting ov	erall v	vater o	quality	and st	ream h	ealth.	_
Releasing stored wa	ter from on-ch	anne	ponds	s can ac	dd war	med wa	aters to	a rec	eiving	stream	and e	xacerba	ate_
issues caused by inc	reased water to	empe:	rature.	As su	ch, OE	DFW (tl	nrough	consi	ıltatior	with (	ODEQ	) deter	mined_
that the proposed u	se would imp	air w	ater q	uality	that su	ipport:	s exist	ing fis	hery r	esour	es (e.g	g., hab	itat)
at or downstream of the Point of Diversion during June – October (the critical period for temperature in													
the North Coast TMDL).													
Because of these reasons, the proposed use will diminish water quality, physical habitat, and/or alter the flow													
regime to which fish are naturally adapted. These changes will negatively affect their distribution,													
productivity, and abundance. Therefore, a further reduction in flow or alteration of habitat from the proposed													
use would result in a significant detrimental impact to an existing fishery resource without appropriate													
conditions and/or mitigation.													
Impairment to		<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	May	<u>Jun</u>	<u>Jul</u>	Aug	<u>Sep</u>	<u>Oct</u>	Nov	<u>Dec</u>
Fishery Resource													

Impairment to	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
Fishery Resource												
Water Quantity												
Water Quality												

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**If YES,** can conditions be applied to mitigate the significant detrimental impact to an existing fishery resource?

□ **NO** (explain) □ **YES** (select from Menu of Conditions on next page)

☑ See applicable conditions selected from "Menu of Conditions" on next page

Water is only available to support the quality and quantity of biologically necessary flows at the POD and/or downstream during January and February. ODFW recommends the storage season be restricted to coincide with this period or the proposed use be mitigated prior to issuance of a Final Order for any storage outside of this period. Without appropriate conditions (see below) and/or mitigation, a further reduction in flow or alteration of habitat from the proposed water use outside of this period will result in a significant detrimental impact to an existing fishery resource. In addition, releases of detained water must meet water quality standards and should be limited to periods outside of the critical peak temperature and low flow periods (summer).

Mitigation is often complicated, time consuming, and expensive, and may include, but is not limited to, actions such as replacing the proposed amount of water through purchasing or transferring an existing water right. If the applicant chooses to pursue mitigation after application submittal to WRD, ODFW will provide a Mitigation Obligation consistent with the goals and standards of OAR 635-415-0025 (ODFW Habitat Mitigation Recommendations) to compensate for any potential impact from the proposed use. Upon request, the WRD caseworker can schedule a consultation with ODFW for more information.

## Site Specific Condition (recommended regardless of whether the applicant pursues mitigation for storage outside of January – February):

The pond shall not impair water temperature in Beaver Creek during June 1 – October 31. The applicant shall install, operate, and maintain a bypass system or the pond shall be removed/decommissioned, and the stream restored and connected to its original state, prior to issuance of a Final Order unless the applicant can provide an ODFW-approved alternative or suitable evidence that the pond is not contributing to temperature impairment.

## **Additional Information:**

If the applicant ever needs to provide maintenance to the ponds due to sediment or other issues, moving/removing more than 50 cubic yards each year may require a permit from the Department of State Lands.

To reduce the negative impacts of Pond 1 on fishery resources in Beaver Creek, releases of detained water should be limited to periods outside of the critical peak temperature and low flow periods (summer). The pond should be retrofitted with a bypass system that allows inflow to pass around the pond at least during June 1-October 31, the critical stream temperature period specified in the North Coast Subbasins TMDL. If the pond cannot be retrofitted with a bypass system, it should be removed unless the applicant can provide ODFW with a suitable alternative or sufficient proof that the pond is not contributing to temperature impairment.

If the reservoir is to be removed or retrofitted, a hydrogeologist, Professional Engineer, or other similar consultant should be hired to ensure the work is completed correctly and will not cause any further upstream or downstream degradation. In addition, the removal may require additional agency consultation

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to ensure that appropriate steps are taken to protect water quality during the decommissioning. Among others, consultation with the Department of State Lands <u>Removal/Fill program</u> and the Department of Environmental Quality <u>1200C Construction</u> Stormwater program should occur before any work begins.

There are several ways to provide bypass in the form of a structure located at the upstream end of the system (i.e., at a location before the stream enters the pond) with an inlet and one or more outlets. The outlets provide a route for water to exit the structure and can take various forms such as pipes or weirs. Sometimes these bypass systems are fitted with valves or gates to shut-off the opening and prevent water from flowing through them. The size, elevation, and type of inlet and outlet impacts the amount of flow that can exit the system.

- If the bypass structure blocks the entire stream, it would require at least two outlets one outlet that discharge water to the stream and one outlet that discharges water to the reservoir. If providing streamflow during low flow is the goal, then the lower outlet would need to be the one that directs the water to the stream (as the lower outlet will discharge even low flows).
- If the bypass structure does not block the entire stream and the inlet to the bypass structure is raised such that only a portion of high flows can enter the inlet (such that the stream at low levels continues unabated), then it could have just one outlet to the reservoir.

It would be important for a designer to determine what flow would be provided to the stream prior to any flow entering the reservoir and the average annual or average summertime amount that would be diverted away from the stream.

A google search of "flow splitter detail", "in-stream diversion detail" might be helpful to look at different design options. A few examples of in-stream bypasses can be viewed here: <a href="http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.583.2520&rep=rep1&type=pdf">http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.583.2520&rep=rep1&type=pdf</a> <a href="https://www.fs.fed.us/t-d/pubs/pdfpubs/pdf13251801/pdf13251801dpi100.pdf">https://www.fs.fed.us/t-d/pubs/pdfpubs/pdf13251801/pdf13251801dpi100.pdf</a> <a href="https://ascelibrary.org/doi/abs/10.1061/40581%282001%29116">https://ascelibrary.org/doi/abs/10.1061/40581%282001%29116</a>

ODFW Signature:	Print Name: Danette Faucera				
ODFW Title: Water Policy Coordinator	Date: 1/14/22				

NOTE: This completed form must be returned to the applicant.

Revised 10/4/12; reformatted 5/12/20

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## MENU OF CONDITIONS FOR WRD, ODFW, DEQ AND ODA Revised May 12, 2020, March 25, 2021

Use this menu to identify appropriate conditions to be included in the permit:

	Agricultural Water Quality Management Area Rules: The permittee shall comply with basin-specific Agricultural Water Quality Management Area Rules described in Oregon Administrative Rule Chapter 603-095. The permittee shall protect riparian areas, including through irrigation practices and the management of any livestock, allowing site capable vegetation to establish and grow along streams, while providing the following functions: shade (on perennial and some intermittent streams), bank stability, and infiltration or filtration of overland runoff.
	<b>b52</b> Water may be diverted only when Department of Environmental Quality sediment standards are being met.
	<b>b5</b> The water user shall install and maintain adequate treatment facilities meeting current DEQ requirements to remove sediment before returning the water to the stream.
$\boxtimes$	<b>b51a</b> The period of use has been limited to <u>January</u> through <u>February</u> .
	<b>b57</b> Before water use may begin under this permit, a totalizing flow meter must be installed at each diversion point.
	<b>b58</b> Before water use may begin under this permit, a staff gage that measures the entire range and stage between full reservoir level and dead-pool storage must be installed in the reservoir. The staff gage shall be United States Geological Survey style porcelain enamel iron staff gage style A, C, E or I.
	<b>blv:</b> Water must be diverted to a trough or tank through an enclosed water delivery system. The delivery system must be equipped with an automatic shutoff or limiting flow control mechanism or include a means for returning water to the stream source through an enclosed delivery system. The use of water shall not exceed 0.10 cubic feet per second per 1000 head of livestock.
	<ul> <li>Bypass Flows: Per 690-410-0070 (2)(c), the following flows shall be bypassed or passed through the reservoir during the filling season:</li> <li>When the biologically necessary flows identified below are not available immediately upstream of the impacted area, the permittee shall pass all live flow downstream at a rate equal to the inflow, minus the amount of mitigation water provided upstream, if applicable, and</li> <li>When the biologically necessary flows identified below are available immediately upstream of the impacted area, the permittee shall pass flow downstream at a rate equal to or greater than the biologically necessary flows.</li> <li>Once the reservoir has reached the permitted volume, all live flow shall be passed downstream at a rate equal to the inflow.</li> </ul>
	The permittee shall quantify and document inflow and outflow and maintain the bypass flows for the life of the permit and subsequent certificate per the approved Bypass Plan. The bypass flow data shall be available upon request by the Oregon Water Resources Department, Oregon Department of Fish and Wildlife, Oregon Department of Environmental Quality, or Oregon Department of Agriculture.
	<b>Construction Activities:</b> For construction activities (clearing, grading, excavation, staging, and stockpiling) that will disturb one or more acres and may discharge to state waters, the permittee is required to obtain from DEQ a 1200-C NPDES Stormwater Construction Permit prior to project construction.
	<b>fence:</b> The stream and its adjacent riparian area shall be fenced to exclude livestock.
	<b>fishapprove:</b> The permittee shall install, maintain, and operate fish screening and by-pass devices consistent with current Oregon Department of Fish and Wildlife (ODFW) standards. Fish screening is to prevent fish from entering the proposed diversion while by-pass devices provide adequate upstream and downstream passage for fish. The required screen and by-pass devices are to be in place and functional, and approved in writing by ODFW prior to diversion of any water. The permittee may submit evidence in writing that ODFW has determined screens and/or by-pass devices are not necessary.
	<b>fishdiv33:</b> If the riparian area is disturbed in the process of developing a point of diversion, the permittee shall be responsible for restoration and enhancement of such riparian area in accordance with ODFW's Fish and Wildlife Habitat Mitigation Policy OAR 635-415. For purposes of mitigation the ODFW Fish and Wildlife Habitat Mitigation Goals and Standards, OAR 635-415, shall be followed.
	The use may be restricted if the quality of the source stream or downstream waters decrease to the point that those waters no longer meet existing state or federal water quality standards due to reduced flows.
	The permittee shall install, maintain, and operate fish screening and by-pass devices consistent with current Oregon Department of Fish and Wildlife (ODFW) standards. Fish screening is to prevent fish from entering the proposed diversion while by-pass devices provide adequate upstream and downstream passage for fish. The required screen and by-pass devices are to be in place and functional, and approved in writing by ODFW prior to diversion of any water. The permittee may submit evidence in writing that ODFW has determined screens and/or by-pass devices are not necessary.
	<b>fishmay:</b> Not withstanding that ODFW has made a determination that fish screens and/or by-pass devices are not necessary at the time of permit issuance, the permittee may be required in the future to install, maintain, and operate fish screening and by-pass devices to prevent fish from entering the proposed diversion and to provide adequate upstream and downstream passage for fish.

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	<b>fishpass:</b> As required by ORS 509.585, a person owning or operating an artificial obstruction (AO) may not construct or main waters of this state that are inhabited, or historically inhabited, by native migratory fish (NMF) without providing passage for the or operating an AO shall, prior to construction, fundamental change in permit status or abandonment of the AO in any waters of determination from ODFW as to whether NMF are or historically have been present in the waters. If ODFW determines that N have been present in the waters, the person owning or operating the AO shall either submit a proposal for fish passage to ODFF or exemption. Approval of the proposed fish-passage facility, waiver, or exemption must be obtained from the department prior modification or abandonment of the AO. Approved fish-passage plans, waivers, and exemptions shall maintain adequate passage (ORS 509.601) as per the approved plan, waiver or exemption.	NMF. A person owning of this state, obtain a MF are or historically W or apply for a waiver r to construction, permit
	<b>fishself:</b> The permittee shall install, maintain, and operate fish screening and by-pass devices consistent with current Oregon I Wildlife (ODFW) standards. Fish screening is to prevent fish from entering the proposed diversion while by-pass devices provand downstream passage for fish. The required screen and by-pass devices are to be in place and functional prior to diversion a shall obtain written approval from ODFW that the installation of the required screen and by-pass devices meets the state's crite submit documentation that ODFW has determined screens and/or by-pass devices are not necessary.	vide adequate upstream of any water. Permittee
	<b>Fish Stocking:</b> Per ORS 498.222 and OAR 635-007-0600, all persons transporting fish in Oregon need to have a fish transport or Oregon Department of Fish and Wildlife (ODFW). The permittee shall not stock fish in the reservoir without a fish transport podfw. As part of the permitting process, the permittee must also screen the inlet and outlet of their pond to insure that fish cawaters and/or to keep wild fish from entering the pond.	permit approved by
	<b>futile call:</b> The use of water allowed herein may be made only at times when waters from the (NAME OF SURFACE WATE flow into a tributary of the <u>type here</u> River or sufficient water is available to satisfy all prior rights, including rights for maintain	
	<b>In-Water or Riparian Construction:</b> For in-water or riparian construction, permittee may be required to obtain additional per Department of State Lands, the U.S. Army Corps of Engineers, and the DEQ Section 401 certification program prior to construct must contact these agencies to confirm requirements.	
$\boxtimes$	In-Water Work: Any in-water work related to construction, development, or maintenance of the proposed use shall be conductive work period of <u>July 15-September 15</u> unless an alternate time period is approved by the Oregon Department of Fish and Wildle	
$\boxtimes$	<b>Live Flow:</b> Once the allocated volume has been stored, permittee shall pass all live flow downstream at a rate equal to inflow, protect instream water quality.	using methods that
	<b>Off-Channel Stored Water Releases:</b> The permittee shall not release polluted water from this off-channel reservoir into water when the release is directed by the State Engineer to prevent dam failure.	rs of the state except
	<b>On-Channel Reservoir:</b> The permittee shall design and operate the water storage facility such that all waters within and below water quality criteria. The permittee shall develop a reservoir operations plan that details how water quality criteria and standar Certified Water Rights Examiner shall verify that the reservoir operations are consistent with the plan before a certificate is issue operator shall maintain a copy of the plan and make it available for review upon request.	rds will be met. A
	<b>riparian:</b> If the riparian area is disturbed in the process of developing a point of diversion, the permittee shall be responsible to enhancement of such riparian area in accordance with ODFW's Fish and Wildlife Habitat Mitigation Policy OAR 635-415. Fo the ODFW Fish and Wildlife Habitat Mitigation Goals and Standards, OAR 635-415, shall be followed.	
$\boxtimes$	Water Quality: All water use under this permit shall comply with state and federal water quality laws. The permittee shall not federal water quality standards, shall not cause pollution of any waters of the state, and shall not place or cause to be placed any where such wastes are likely to escape or be carried into the waters of the state by any means. The use may be restricted if the or downstream waters decrease to the point that those waters no longer meet existing state or federal water quality standards.	y wastes in a location
$\boxtimes$	wetland: The permittee must submit an offsite determination request to the Oregon Department of State Lands (DSL) to determine wetland delineation prior to disturbance or development of the point of diversion and/or diversion of water.	mine the need for a
	<b>wq:</b> The use may be restricted if the quality of the source stream or downstream waters decrease to the point that those waters state or federal water quality standards due to reduced flows.	no longer meet existing