### BEFORE THE WATER RESOURCES DIRECTOR OF OREGON

#### MORROW COUNTY

IN THE MATTER OF APPLICATION G-11239 IN THE NAME OF PORT OF MORROW FOR A PERMIT TO APPRO- PRIATE GROUND WATER FROM A 6-ACRE POND (TOADVIN POND)	) ) )	STATEMENT, FINDINGS, CONCLUSIONS & ORDER
6-ACRE PUND (TUADVIN PUND)	) 	

## STATEMENT

Application G-11239 was filed in the office of the Water Resources Director on March 1, 1984, for a permit to appropriate 6.525 cubic feet per second from a certain ground water reservoir by pumping from a six-acre excavated pond which is identified in this matter as Toadvin Pond, for irrigation of a certain 522.0 acres in Section 24 of Township 4 North, Range 25 East, WM, Morrow County, Oregon. The point of diversion of water from Toadvin Pond is described as being 1602 feet north and 191 feet west from the Southeast Corner of the SW 1/4 NE 1/4 of Section 10, being within the NW 1/4 NE 1/4 of Section 10, Township 4 North, Range 25 East, WM. (Exhibit WRD #1)

A protest against approval of the said application was filed by Arnold Braat on April 16, 1984, and was amended by additional data filed by Arnold Braat on April 18, 1984. In the amended protest it is alleged that the proposed appropriation of ground water would result in injury to the protestant's existing surface and ground water rights pursuant to Permit 43606 and Permit G-6876. (Exhibits WRD 2, WRD #3, WRD #4 and WRD #5)

Pursuant to the provisions of ORS 537.622(2) and the Director's Notice of Hearing dated May 29, 1984 (Exhibit WRD #6), the matter was brought to hearing in Boardman, Oregon, on June 20, 1984, before James W. Carver, Jr., an employee of the Water Resources Department, authorized to preside in behalf of the Director.

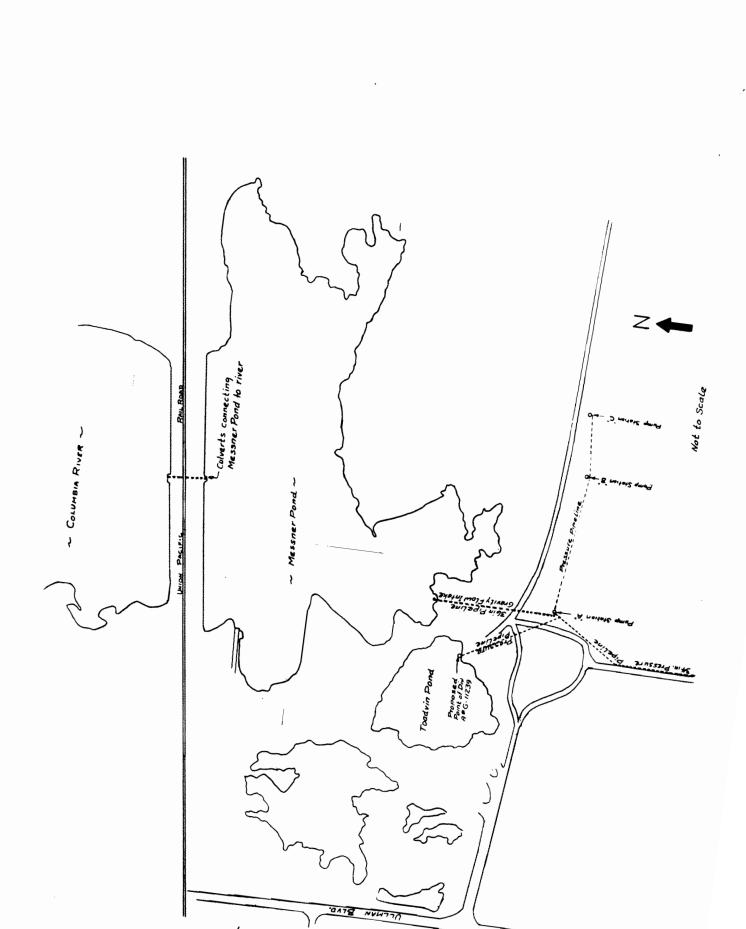
Protestant Arnold Braat appeared pro se. The Port of Morrow, applicant, was represented by Robert E. O'Rourke, Attorney at Law, Pendleton, Oregon.

The relative locations of Toadvin Pond, Messner Pond, Columbia River, existing and proposed pipelines, pumping stations, and the culverts connecting Messner Pond to the Columbia River (storage pool above John Day Dam) are shown on Figure 1, herein. Figure 1 is a reduced, partial tracing from Port of Morrow exhibit A.

Based on the record, the Water Resources Director makes the following Findings of Fact, Conclusions of Law and Order.

### FINDINGS OF FACT

Toadvin Pond, the source of the proposed appropriation of ground water, as described by Application G-11239, is an excavation into alluvial materials composed of gravel and sand and gravel.



• • Ground water occurs in the alluvium and measurements made of record through testimony indicate that movement of the ground water is from the south, toward the Columbia River on the north, within this unconfined alluvial aquifer.

Toadvin Pond has a water surface area of approximately six acres and a water depth of 20 to 24 feet in the deeper places. The water surface elevation in Toadvin Pond demonstrates the depth to ground water in the immediate area.

Measurements of the relative surface elevations of Toadvin Pond and Messner Pond, made over the period of time extending from January to June of 1984 and made of record in the hearing, show the water surface in Messner Pond to average from about two to four feet lower than the water surface in Toadvin Pond.

Messner Pond is connected to the Columbia River (storage pool above John Day Dam) by means of a pair of culverts extending through the rail road grade fill which otherwise separates Messner Pond from the Columbia River. The two culverts are installed with one lying above the other. The upper culvert has a diameter of 48 inches and the lower culvert has a diameter of 30 inches. The invert elevations of the 48 inch culvert are: 263.2 m.s.l. on the Columbia River end, and 260.8 m.s.l. on the Messner Pond end. The invert elevations of the lower, 30 inch culvert are: 254.3 m.s.l. on the Columbia River end, and 252.5 m.s.l. on the Messner Pond end. (Port of Morrow exhibit B)

The sill elevation of the John Day Dam spillways is at 257.5 m.s.l.

The water surface elevation of the Columbia River at Boardman has remained above the elevation of 260 m.s.l. 99 percent of the time over the period of years of 1978 to the present.

Protestant's existing pump sump (Pump Station "A" on Figure 1) is connected to Messner Pond by means of a buried 36 inch diameter pipeline which conducts water from Messner Pond to the pump sump by gravity flow. The invert elevation of the 36 inch pipeline is approximately 255.0 m.s.l.

Protestant's pumping sump (Pump Station A on Figure 1) initially consisted of an 8-foot diameter steel casing installed to a depth of approximately 20 feet below land surface to serve as a shallow well to develop a yield of ground water from the alluvial ground water aquifer. Upon initial construction, a 24-hour pumping test showed a yield of 2,200 gallons per minute of ground water with a pumping depth of 18 feet below land surface.

The initially developed yield of ground water declined after the first several days of operation. To enhance the movement of ground water into the casing, two 24-inch, perforated, corrugated steel pipelines were installed to extend out horizontally from the lower portion of the casing, into the alluvial aquifer. One such leach (infiltration lateral) line extends to the east for a distance of approximately 200 feet. The other such line extends to the west southwest for a distance of approximately 50 feet.

The addition of the two leach lines still did not provide an adequate supply of water to meet the needs of the appropriation for irrigation purposes. After temporary measures were employed to obtain additional water supply from other sources, the aforesaid gravity flow line from Messner Pond to the pumping sump was installed. The bottom of the gravity flow line, as it enters the 8-foot diameter casing, is at about the same elevation as the bottoms of the leach lines.

The gravity flow pipeline connecting Pumping Station A with Messner Pond is not provided with control valves or other means to control inflow of water from Messner Pond to the sump, or to control outflow of ground water from the sump to Messner Pond.

The record does not clearly answer the question as to whether the proposed appropriation of 6.525 cubic feet per second of water from Toadvin Pond would or would not have a measurable effect on the protestant's pumping of surface and/or ground water from his Pumping Station A.

The protestant has the initial burden of proof to show substantial interference with his existing water rights. That burden was not met.

## OPINION

The absence of control valves and measuring devices on the protestant's combined ground water development and pumping station for surface waters from Messner Pond (Pump Station A) has made it not possible to know what portion of the waters pumped at Pump Station A have come from ground water inflow from the surrounding alluvial aquifer and what portion have come from Messner Pond, or what portion of that, in turn, may have passed through the culvert installation through the rail road fill separating Messner Pond from the Columbia River (storage pool above John Day Dam).

It is likely that at least a portion of the inflow to Messner Pond is a result of ground water discharge to the pond from the shallow alluvial aquifer. What effect the operation of Pump Stations B and C and the operation of the proposed appropriation of water from Toadvin Pond may have on that inflow is not known.

Testimony indicates that construction of Pumping Stations B and C is similar to that of Pumping Station A prior to installation of the gravity flow intake from Messner Pond to Pumping Station A.

Any permit that might be issued in approval of pending Application G-11239 would be issued subject to prior existing water rights. If it is later determined that pumping from Toadvin Pond at the proposed rate of 6.525 cubic feet per second results in a measurable interference on others obtaining water to which they are entitled under prior rights, the appropriation of water proposed by Application G-11239 would have to be regulated in relation to those prior water rights whether for surface or ground water.

The protestant has alleged that the proposed appropriation of water from Toadvin Pond as described by Application G-11239 "might" deprive him of water to which he is entitled. The evidence adduced simply does not establish even a probability of such result. The record does not provide a basis for denial of the pending Application G-11239.

# CONCLUSIONS OF LAW

Pursuant to the provisions of ORS 183.450, OAR 690-01-040 and OAR 137-03-040(4) the protestant had the initial burden to support with evidence his allegation that the appropriation of ground water as proposed by pending Application G-11239 would measurably interfere with his obtaining the water to which he is entitled under his existing water rights. The evidence adduced does not provide a basis for denial of pending Application G-11239 as requested by protestant.

ORS 537.620(3) provides, "When an application discloses the <u>probability of</u> wasteful use or <u>undue interference with existing wells</u> or that any proposed use <u>or</u> well <u>will impair or</u> <u>substantially interfere with existing rights to appropriate surface water by others, the director may impose conditions or limitations in the permit to prevent the same or reject the same after hearing, or, in the director's discretion, initiate a proceeding for the determination of a critical ground water area under ORS 537.730 to 537.740." (emphasis supplied)</u>

The record does not preclude a possibility of measurable interference with other wells in the area or with existing rights to appropriate surface water by others. However, the record does not establish a probability of such interference.

ORS 537.620(5) provides, in part, "No application shall be approved when the same will deprive those having prior rights of appropriation for a beneficial use of the amount of water to which they are lawfully entitled."

The pending Application G-11239 should be approved by issuance of a permit which includes the limitation that the authorized appropriation of water from Toadvin Pond is subject to prior existing water rights for both surface and ground water. Such limitation will place the permittee on notice that if it is determined in the future that measurable interference with prior existing water rights exists, the authorized appropriation of water as proposed by Application G-11239 will be regulated by the watermaster accordingly.

# <u>ORDER</u>

NOW, THEREFORE, it is ORDERED that pending Application G-11239 in the name of the Port of Morrow, for appropriation of 6.525 cubic feet per second of water from a six acre pond (Toadvin Pond) for the purpose of irrigation of a certain 522.0 acres described therein, be approved by issuance of a permit which includes the limitation, "The appropriation of ground water hereby authorized shall be subject to prior existing water rights for both surface and ground water."

Dated at Salem, Oregon this 19th day of October, 1984.

WILLIAM H. YOUNG

Director

NOTE: You are entitled to judicial review of this Order. Judicial review may be obtained by filing a petition for review within sixty days from the service of this Order. Judicial review is pursuant to the provisions of ORS 183.482.

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