

SUSTAINABLE ENVIRONMENT COMMISSION



Steve McGeehan
Commission Chair
sec@ci.moscow.id.us

Regular Meeting
~Agenda~

Kyle Steele
Staff Liaison
208-883-7133

<https://www.ci.moscow.id.us/551/Sustainable-Environment-Commission>

Tuesday
December 17, 2024

6:00 PM

Mayors Conference Room
1st Floor City Hall
206 E. 3rd St.

WELCOME AND ATTENDANCE

REGULAR AGENDA

1. Approval of Sustainable Environment Commission November 19, 2024 Minutes (ACTION ITEM)

Minutes presented for approval.

PROPOSED ACTIONS: Approve the minutes as presented; approve minutes with amendments; or provide staff further direction.

2. Public Comment and Response to Previous Comments (limited to 10 minutes)

Members of the public may speak to the Commission regarding matters NOT on the agenda or currently pending before the Commission. Please state your name and city of residence for the record and limit your remarks to three (3) minutes.

PROPOSED ACTIONS: receive the public comment.

3. Climate Action Planning Questionnaire

Tina will continue the discussion regarding a questionnaire to help prioritize climate action planning.

PROPOSED ACTIONS: discuss and take action as deemed appropriate

4. Water Conservation Plan (ACTION ITEM)

Kelli will present updates on the Water Conservation Plan. The SEC will discuss and vote on preparing a letter of recommendation in support of updates to the plan

PROPOSED ACTIONS: Approve preparing a letter or provide staff further direction.

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REPORTS

1. City Sustainability Report- Kelli Cooper
2. Moscow High School Subcommittee Report – TBD
3. Climate Action Working Group – Tina Hilding

NOTICE: It is the policy of the City of Moscow that all City-sponsored public meetings and events are accessible to all people. If you need assistance in participating in this meeting or event due to a disability under the ADA, please contact the City's ADA Coordinator by phone at (208) 883-7600, TDD (208) 883-7019, or by email at adacoordinator@ci.moscow.id.us at least 48 hours prior to the scheduled meeting or event to request an accommodation. The City of Moscow is committed to ensuring that all reasonable accommodation requests are fulfilled.

SUSTAINABLE ENVIRONMENT COMMISSION



Steve McGeehan
Commission Chair
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Regular Meeting
~Minutes~

Kyle Steele
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Tuesday
November 19, 2024

6:00 PM

Mayors Conference Room
1st Floor City Hall
206 E. 3rd St.

The meeting was called to order at 6:00 p.m.

PRESENT: Steve McGeehan, Asaph Cousins; Sam Gallaher; Gordon Wilson; Tina Hilding; Victoria Seever; Al Poplawski

STAFF: Kelli Cooper; Tyle Palmer

REGULAR AGENDA

1. Approval of Sustainable Environment Commission July 16, 2024 Minutes (ACTION ITEM)

Minutes presented for approval.

PROPOSED ACTIONS: Approve the minutes as presented; approve minutes with amendments; or provide staff further direction.

Victoria moved to approve the July 16, 2024 minutes, and Asaph second to approve minutes as presented.

Roll Call Vote: Ayes: Unanimous. Nays: None. Abstentions: None. **Motion carried.**

2. Public Comment and Response to Previous Comments (limited to 10 minutes)

Members of the public may speak to the Commission regarding matters NOT on the agenda or currently pending before the Commission. Please state your name and city of residence for the record and limit your remarks to three (3) minutes.

PROPOSED ACTIONS: receive the public comment.

None.

3. Palouse Basin Aquifer Committee Update

Tyler Palmer (Deputy City Administrator) and Mike Faupel (Executive Director of PBAC) will provide an update on PBAC's work on our regional water supply.

PROPOSED ACTIONS: discuss and take action as deemed appropriate.

Tyler started with a brief history of the levels of our aquifers over the years. And how they have been declining. Wannapum is the upper, Grand Rhonde is the lower. City of Moscow and City of Pullman are on a separate water system from their local universities; University of Idaho and Washington State University. Moscow is the only pumping entity of the upper aquifer, but there are a lot of private wells in the county.

Tyler went over two of the alternative water supply options. Alternative 2 is currently being examined in depth.

*complete presentation attached.

4. Climate Action Planning Questionnaire

Tina will discuss ideas about the SEC developing a questionnaire to help prioritize climate action planning.

PROPOSED ACTIONS: discuss and take action as deemed appropriate

ICLEI (Local Governments for Sustainability) has come up with a survey to prioritize planning and will be helping the City with the Climate Action Plan. The City will be handing out this survey to Commissions and they will grade each category on the survey.

5. Citizens Survey

Kelli will summarize the results of the Citizens Survey.

PROPOSED ACTIONS: discuss and take action as deemed appropriate

Kelli says the response rate was very low. The group discussed ways to get a better response.

Kelli went over several responses. The group discussed the answers.

REPORTS

1. City Sustainability Report- Kelli Cooper

Final review of the Conservation Water Plan update. They are working on incentivizing the rebate program. Possibly adding a hot water heater rebate.

Wisescape guidebook will possibly get an update as well.

Kelli purchased outlet insulators for Farmers Market giveaways. She will do a Facebook post for residents to pick one up at the Magyar building.

The group came to discuss the possibility of continuing the solar panel project that was started years ago. Kelli encouraged one of them to apply to be the High School representative.

Group has been talking about implementation planning and upcoming newspaper columns.

Community solar is still being explored.

UPCOMING EVENTS / MEETINGS

- ## ADJOURN

Minutes Approved On

(Clerk Signature)

Sustainable Environment Commission Minutes

Page 3 of 3

Palouse Basin Alternate Supply Project

Sustainable Environment Commission

November 19, 2024



Palouse Basin Ground Water Management: The Early Days

Several of the wells at Pullman are allowed to flow, thus wasting a large volume of water . . . If the blessings accompanying the discovery of an excellent water supply are to be maintained, all wells should be closed when not in use. (Russell, 1897)

3,000,000
Gallons per Day

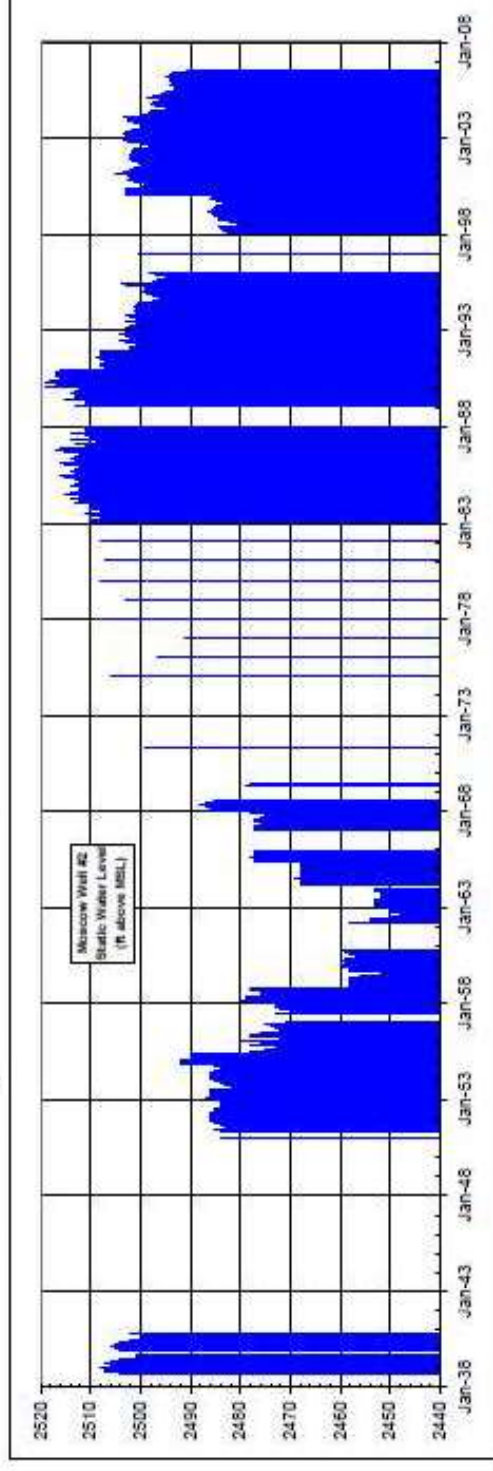


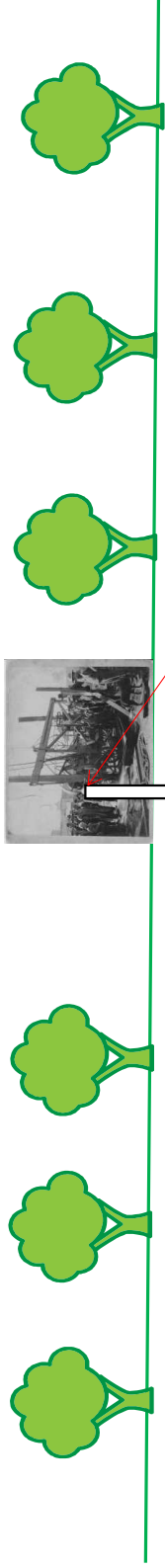
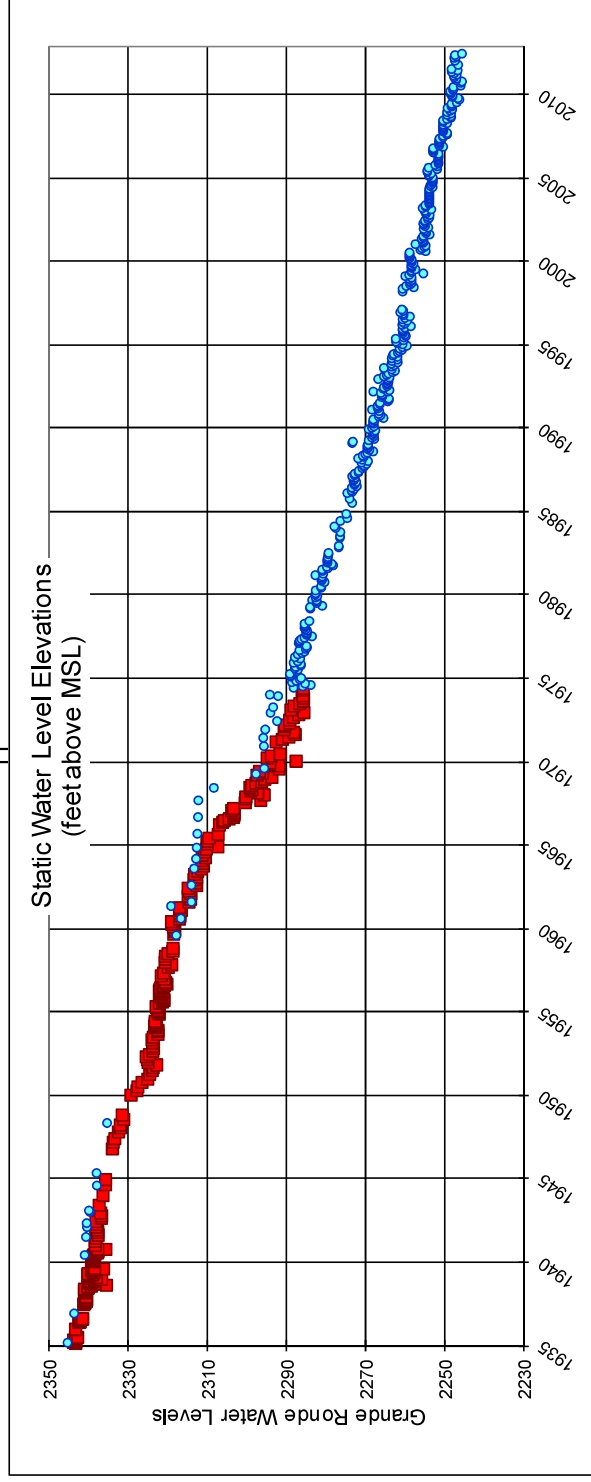
Palouse Basin Ground Water Management: The Early Days Russell (1897)

- 1891 - 10 flowing wells in Moscow
- 1897 - static level 8 to 9 ft below land surface

Later

- 1923 - static level 44 feet down
- 1962 - static level 120 feet down
- 2007 - Depth to Water, Moscow #2 $\approx$ 75 ft



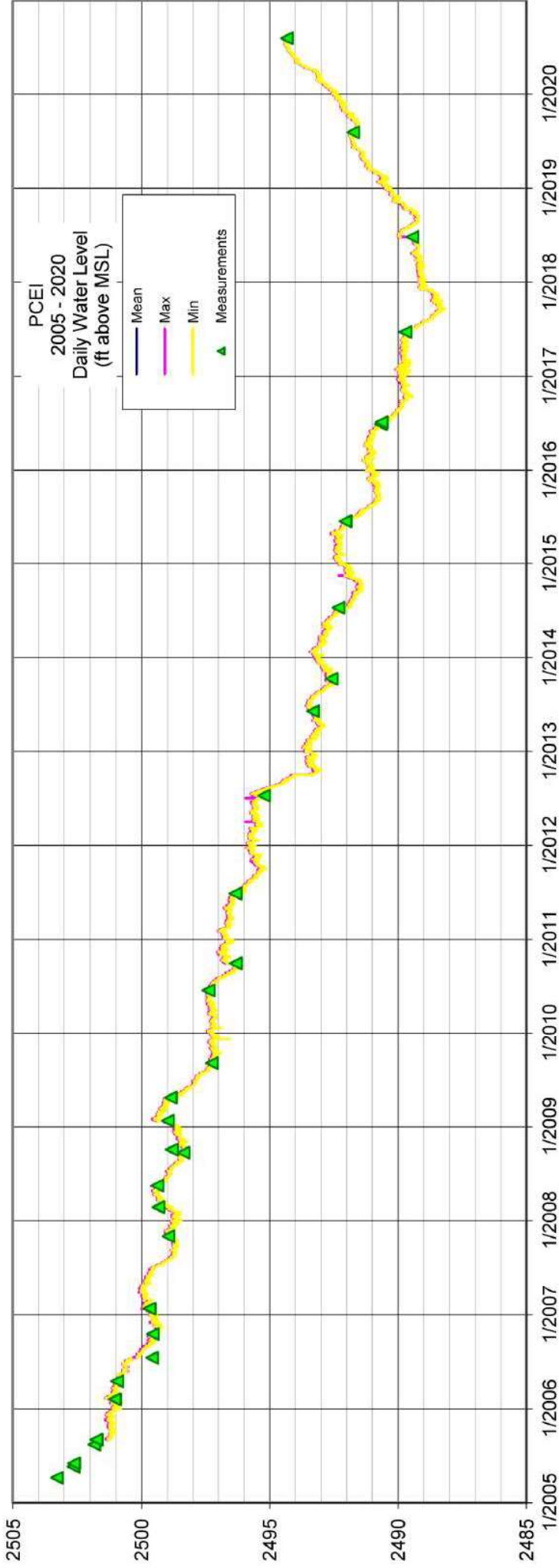


1890 Water Level

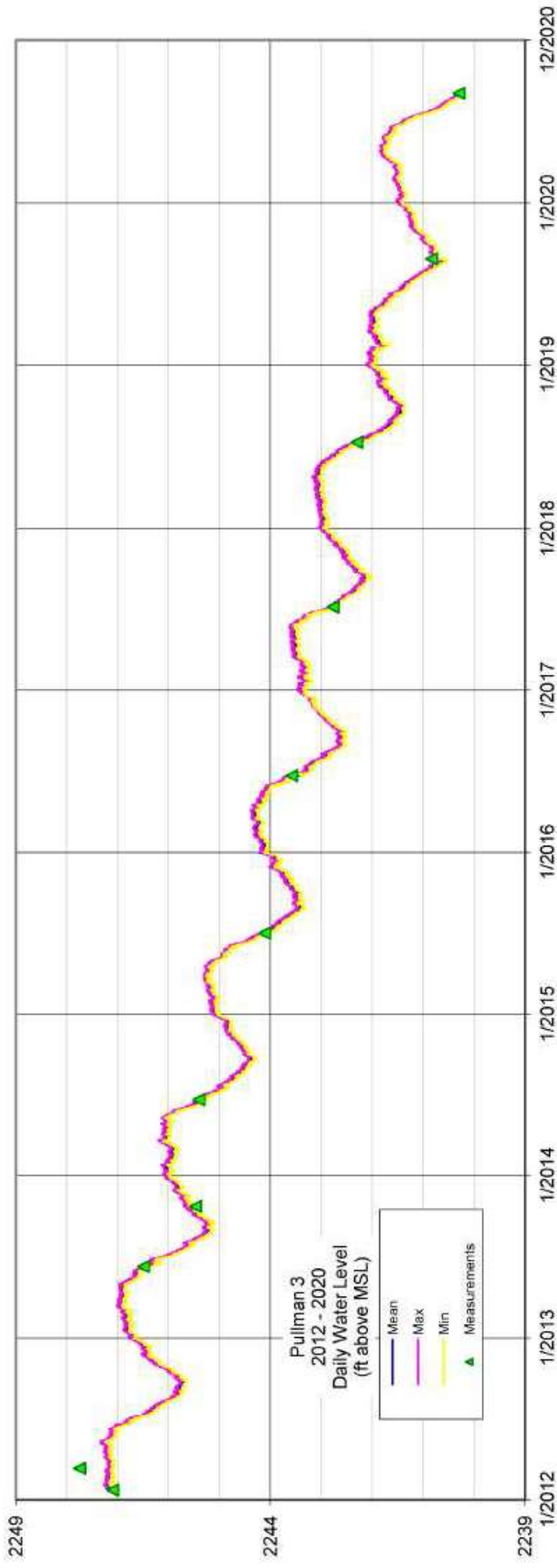
2022 Water Level



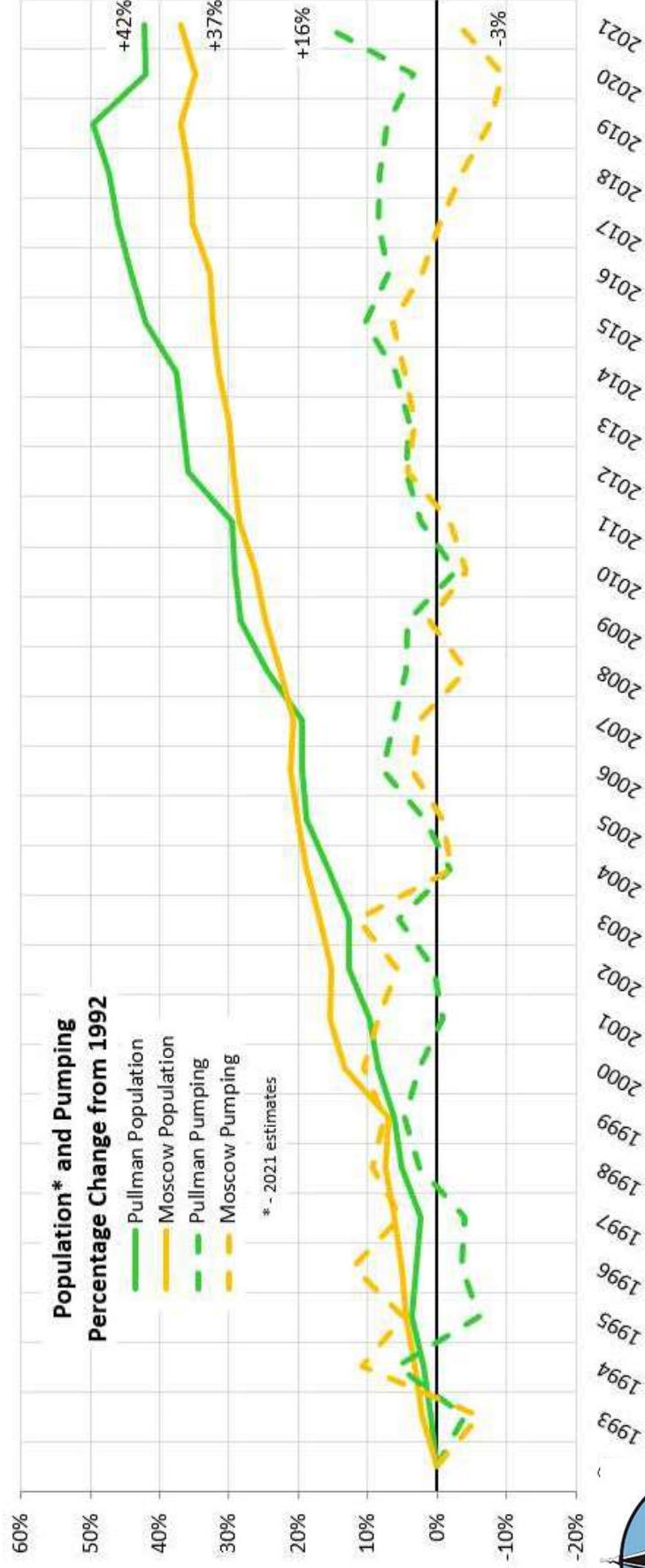
Upper Aquifer Levels



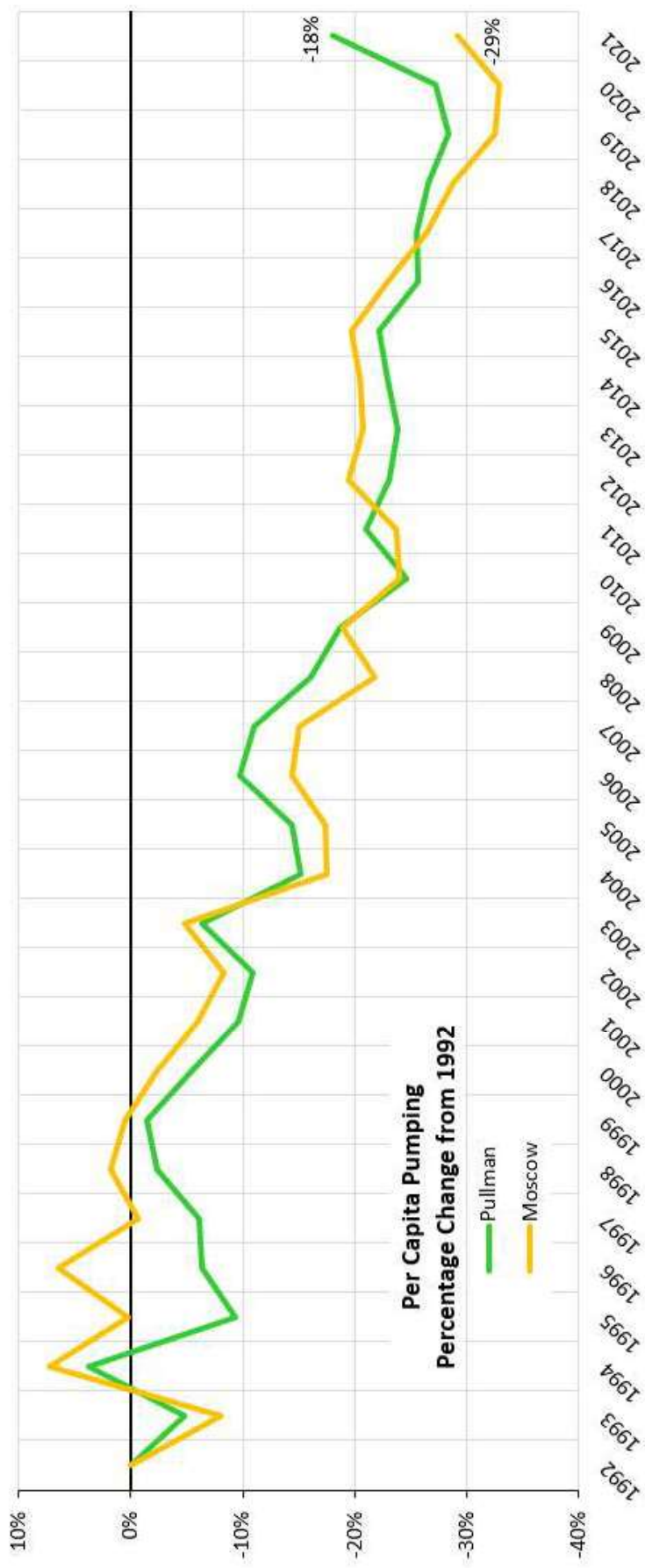
Lower Aquifer Levels



Pop & Pumping % Change from 1992



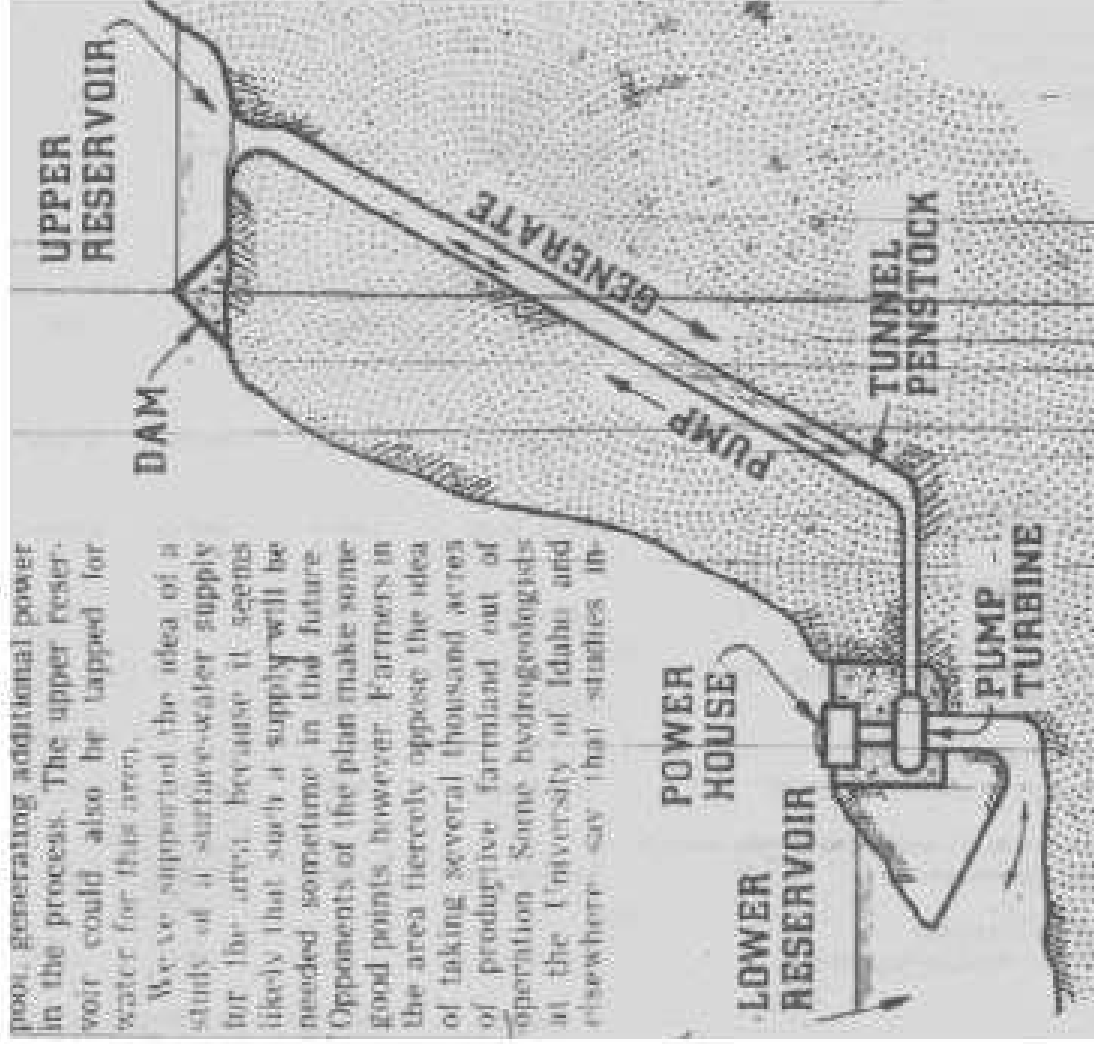
Per Capita Pumping % Change from 1992



- 1976 - Pumped Storage Proposal

pool, generating additional power in the process. The upper reservoir could also be tapped for water for this area.

We've supported the idea of a study of a surface-water supply for the area, because it seems likely that such a supply will be needed sometime in the future. Opponents of the plan make some good points, however. Farmers in the area fiercely oppose the idea of taking several thousand acres of productive farmland out of operation. Some hydrogeologists at the University of Idaho and elsewhere say that studies in-



Palouse Basin Ground Water Management: Pre-Management Plan

• 1976 - Pumped Storage Proposal

Pumped-Storage A fiery confrontation appears brewing between farmers in an area southwest of Pullman and the U.S. Army Corps of Engineers...

A fiery confrontation appears brewing between farmers in an area southwest of Pullman and the U.S. Army Corps of Engineers when the two meet face-to-face in Pullman tomorrow night at a public meeting on a study of a proposed pumped-storage reservoir in the Union Flat Creek area.

The meeting, scheduled to start at 7:30 p.m., at the Gladish Middle School auditorium, NW 115 State St., is being sponsored by the Moscow-Pullman Water Resources/Committee, which may find itself caught in the middle of the battlefield.

The purpose of the meeting will be to determine if the people in the Moscow-Pullman area feel there is a need for a pumped-storage reservoir and to assess local support as well as opposition to the plan, explained the committee chairman.

The study is expected to last for about three years, and its estimated cost is \$290,000. Hoyt said.

Since the study and tomorrow's public hearing were announced, a group of farmers in the area being studied for possible reservoir sites has formed OPAL. Organization for Agricultural Land.

OPAL opposes the proposal because of the loss of farmland that would be lost if the reservoir were built, the group's president, Norman Halley, says.

Not only is it against the construction of the reservoir, Halley's

Resources Committee is supporting the study of the pumped-storage reservoir because of the possible additional water supply to the cities of Moscow and Pullman, explains that panel's chairman, Calvin Warrick of Moscow.

The committee is also involved with several groundwater studies, sponsored by the U.S. Geological Survey on the aquifer of the Moscow-Pullman basin, Warrick said. Other aspects of supplementary water must be investigated in the meantime, he said. "We can't wait until the wells run dry to start considering other sources."

When the study is completed, a decision will be made on whether to build the reservoir.

Col. Nelson Conover, district engineer for the Corps, will preside at the meeting and will make a brief introductory presentation. Hoyt said.

U.S. Senators and Representatives on their field agents will be allowed to speak first if present. Hoyt said.

Persons wishing to testify will be asked to sign up as they enter the meeting and speakers will be selected at random from the list. He said.

There is no time limit for testimony. Hoyt said, but persons with lengthy statements are asked to summarize their remarks briefly and then submit them to the

... have formed OPAL. Organization for the Preservation of Agricultural Land. OPAL opposes the proposal because of the loss of farmland...

Palouse Basin Ground Water Management: Pre-Management Plan

• 1976 - Pumped Storage Proposal

STATION

Wednesday

Mar. 10, 1976 VOL. 83 NO. 83 MOSCOW, IDAHO 10 Cents

Citizens, Officials Rap Corps, Reservoir Plan

By KENTON BIRD
MOSCOW — Col. Nelson Conover of the U.S. Army Corps of Engineers may have felt a little like General Robert E. Lee at Appomattox. And Moskow Mayor Paul Mann said he didn't realize how appropriate his gray coat would be.

It was, though, because with the exception of some isolated defense of the Corps by Mann in his "Confederate" speech, the meeting was a rout for the Corps. The meeting was held in the city hall for the construction of a pumped storage reservoir. Conover emphasized, but rather to determine if such a facility is economically feasible.

In a pumped storage system, he explained, water is pumped from a lower reservoir, such as the pool behind Lower Granite Dam, to an upper reservoir.

get reservoir and then released when needed for power generation and other purposes.

A pumped-storage system makes

Palouse and the Snake River the Union Flat Creek area is ideally suited for such a reservoir system, he said.

Preliminary studies showed the area to be a prime candidate for a pumped storage reservoir because of the possible use of water for irrigation, supplemental water supply for Moskow and Pullman, he said.

Because of the widely fluctuating water levels in the upper reservoir, however, there would be little or no use of it for recreation or fish and wildlife, Conover stated. Earlier literature from the Corps listed recreation, fish and wildlife enhancement as possible benefits from such a

was going to be a need for additional electrical generating power in the future. "I hope when the alternatives show up you will be willing to even

Although several other members of the Halsey family spoke in opposition, Halsey didn't want the crowd to think this was a Halsey vendetta. There used to be a story in Whitman County, he said, that the squirrels, the Halseys and the Drutteds (another family in the area) would some day take over the county. That was before the Army Corps of Engineers came along, he quipped.

Halsey called for an immediate halt to the study and suggested that a feasibility study on whether it is feasible to have an Army Corps of Engineers.

There are only three things the Corps understands: hydroelectric power, political power and people power. Let's stand up and show the colored some of that last kind of power, Halsey said. He said a few of the crowd stood up and applauded.

... a delegation of more than 900 opponents

... suggested instead a feasibility study "on whether it's feasible to have an Army Corps of Engineers."

Palouse Basin Ground Water Management: Pre-Management Plan

- 1976 - Pumped Storage Proposal

An official of the U.S. Army Corps of Engineers has recommended that a study . . . be dropped

. . . in separate decisions yesterday, the Moscow City Council, the Latah County Commissioners, and the Moscow Chamber of Commerce Board of Directors voted their opposition . . .

3/16/76 *Chelanian*

Pump-Storage Study May Be Ended by Corps

The engineering, geologic-storage study of the U.S. Army Corps of Engineers for the proposed pumped-storage study of the feasibility of a pumped-storage "reservoir" northwest of the town of Moscow, Idaho, may be ended by the Corps, according to a report by a Corps official.

William J. McQuinn, Corps engineer for the study, was reported to have advised the Corps that the study should be ended because of the Corps' decision to recommend that the two new 1000-horsepower pumps be installed at the site. The Corps' decision was based on the Corps' decision to recommend that the two new 1000-horsepower pumps be installed at the site.

McQuinn's report was based on the Corps' decision to recommend that the two new 1000-horsepower pumps be installed at the site. The Corps' decision was based on the Corps' decision to recommend that the two new 1000-horsepower pumps be installed at the site.

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P-NWEC Members:

Due to recent "controversy" and a letter dated 3/24/76 from OPAL, I suggest we better decide soon what the future of our Committee is to be. I further suggest that we assess what our Administrators' views are. If any agree in principle with the OPAL letter, I'm for abandoning further work. If a study Committee can't stock to [redacted] with it all.

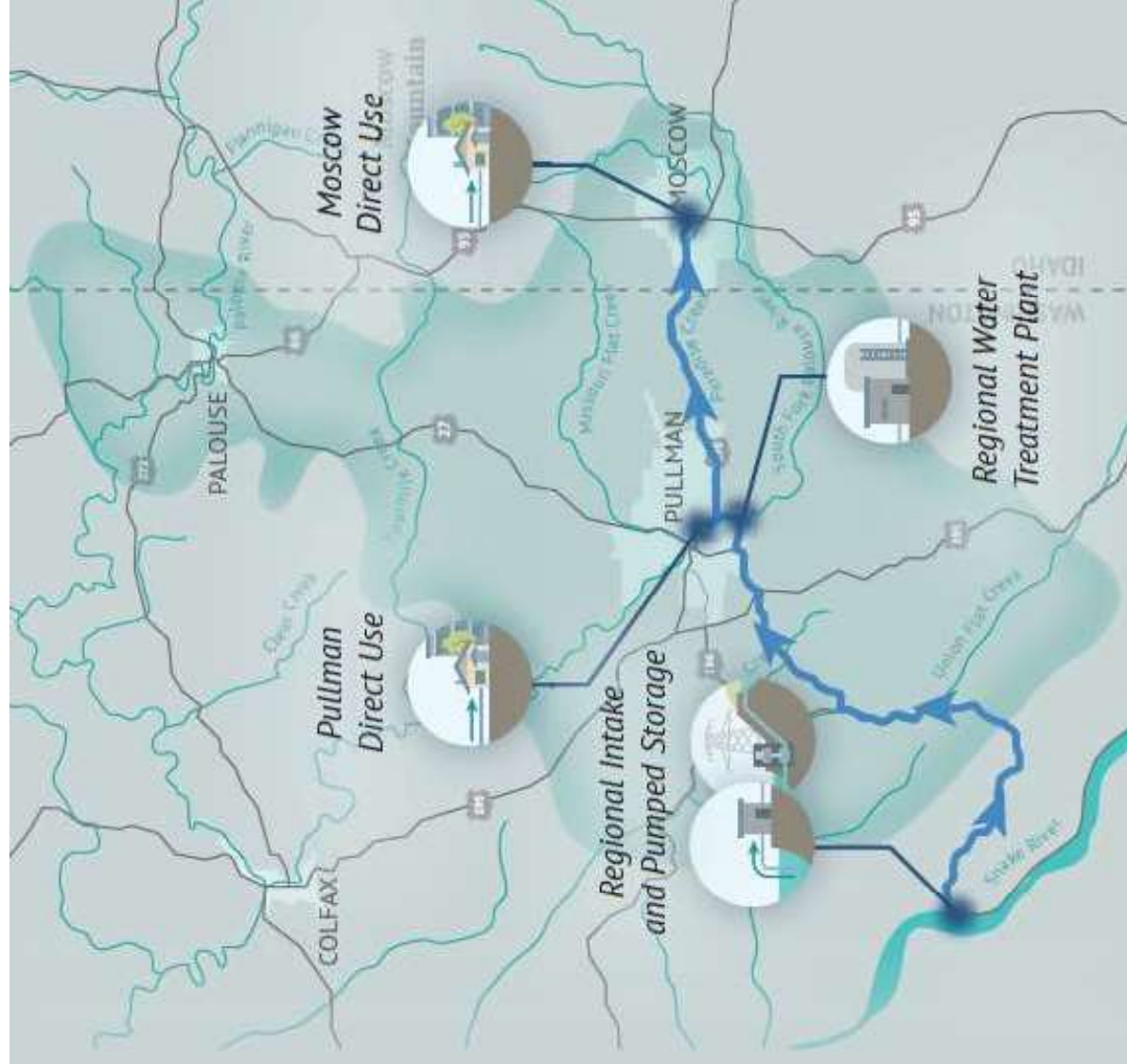
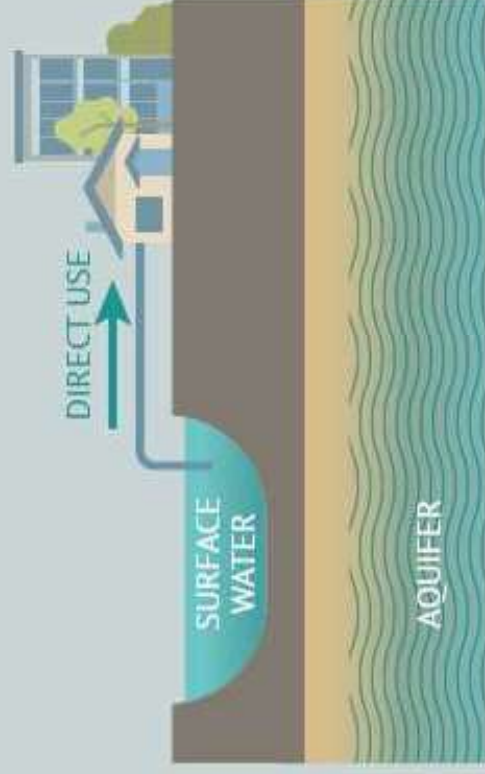
W. J. P.
4/2/76

Alternative 1

Direct Use of the Snake River:

Surface water would be diverted from the Snake River and conveyed to a new regional water treatment plant. There it would be treated and conveyed into the existing municipal water system for Pullman and WSU. An additional pipeline would allow treated water to be conveyed to Idaho into the existing municipal system for Moscow and Ul.

Due to the topography change from the Snake River to the Palouse region, the potential for an off-channel pumped storage reservoir and hydropower facility would be considered to help offset costs and create additional power for the region.



Tyler Palmer

PBAC Chair – City of Moscow

tpalmer@ci.Moscow.id.us



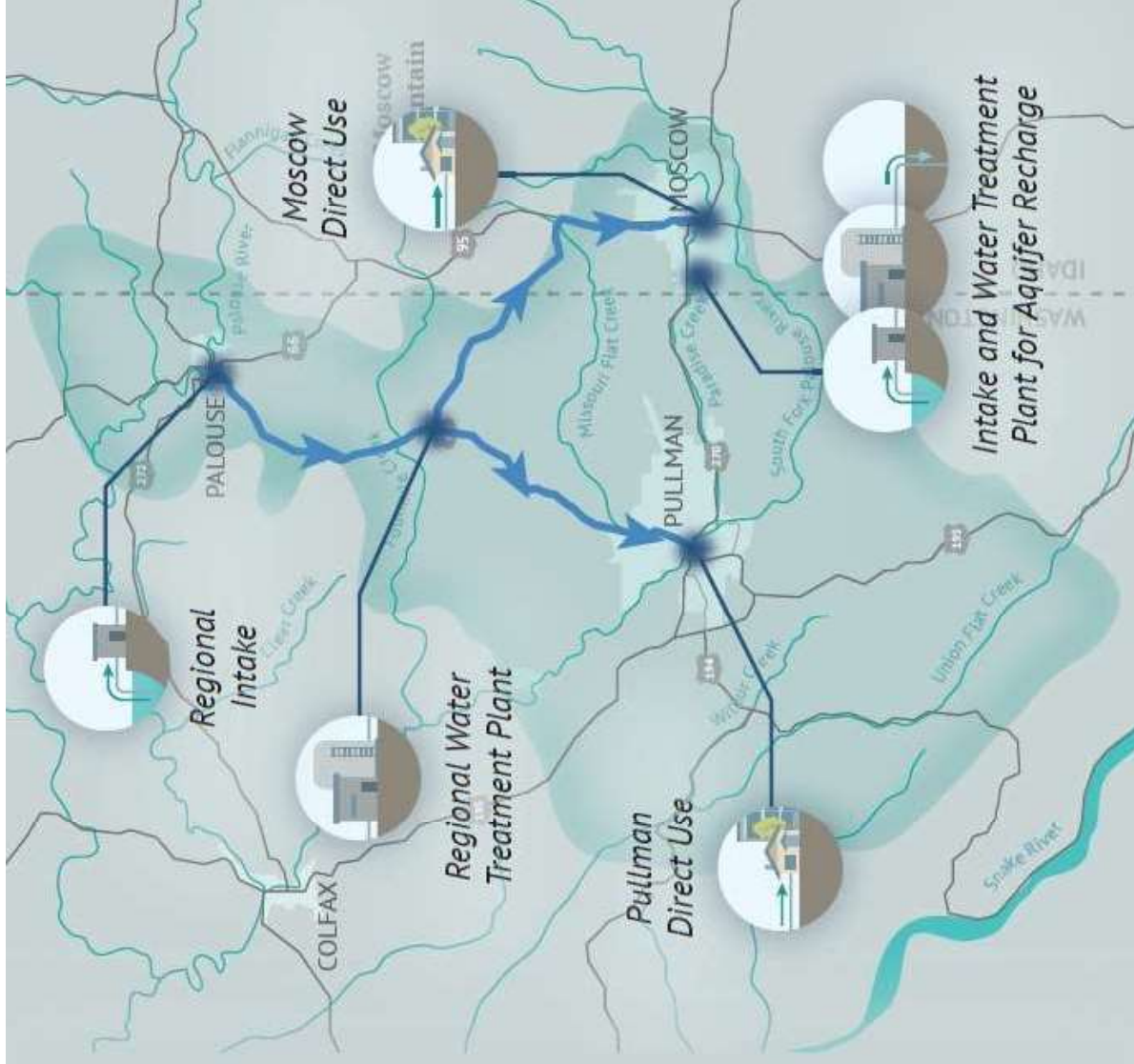
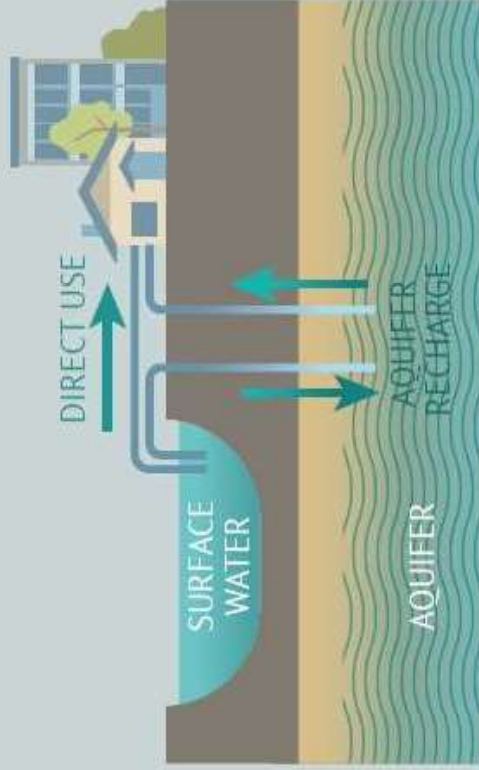
Alternative 2

Direct Use of the North Fork of the Palouse River:

Surface water would be diverted from the North Fork of the Palouse River near Palouse and conveyed to a new regional treatment plant. There it would be treated and conveyed into the existing municipal water system for Pullman and WSU. An additional pipeline would allow treated water to be conveyed to Idaho into the existing municipal system for Moscow and UI.

Aquifer Recharge from the South Fork of the Palouse River or Paradise Creek:

Surface water would be diverted from the South Fork of the Palouse River or Paradise Creek, treated, and injected into the aquifer system via recharge wells.



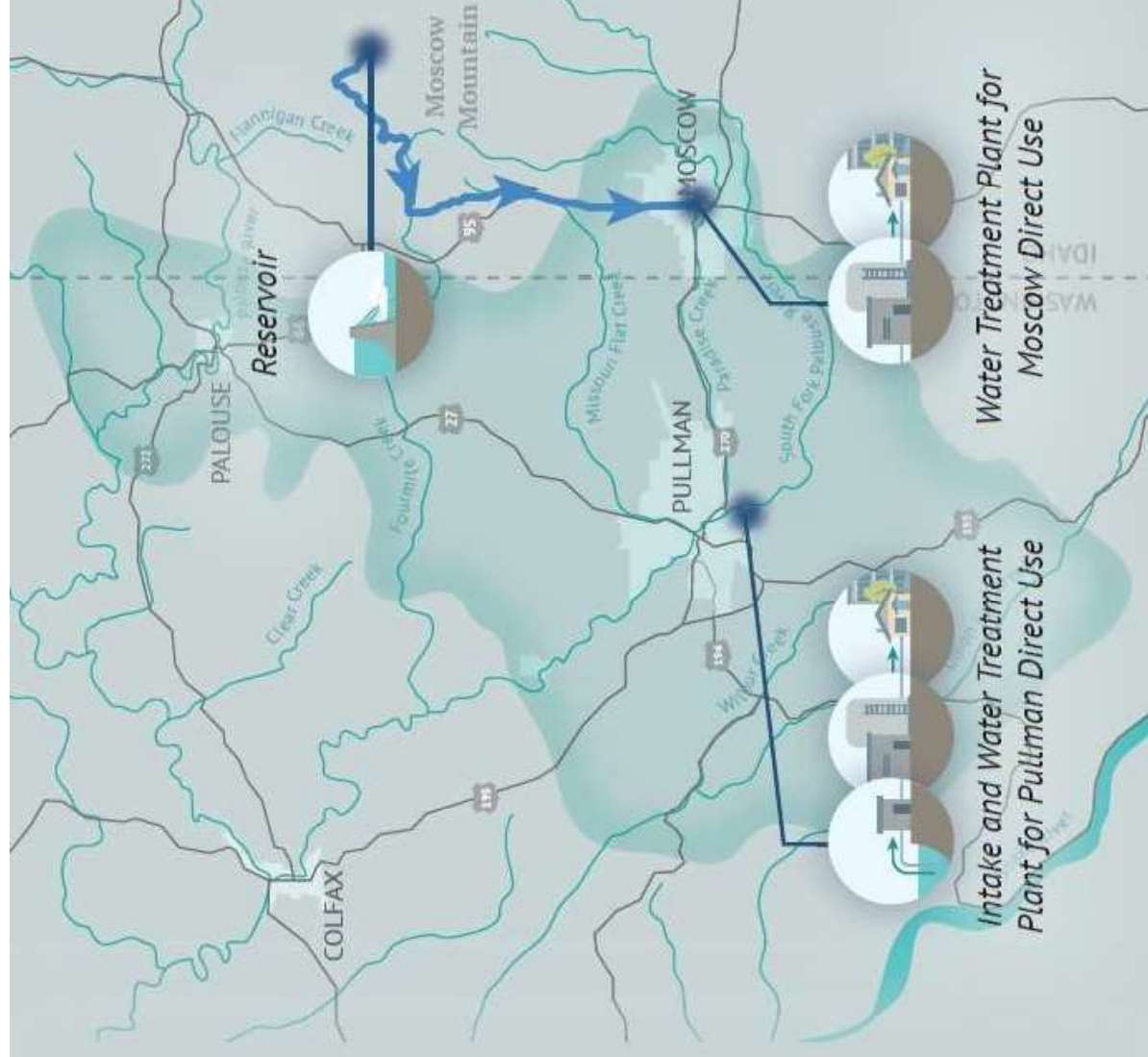
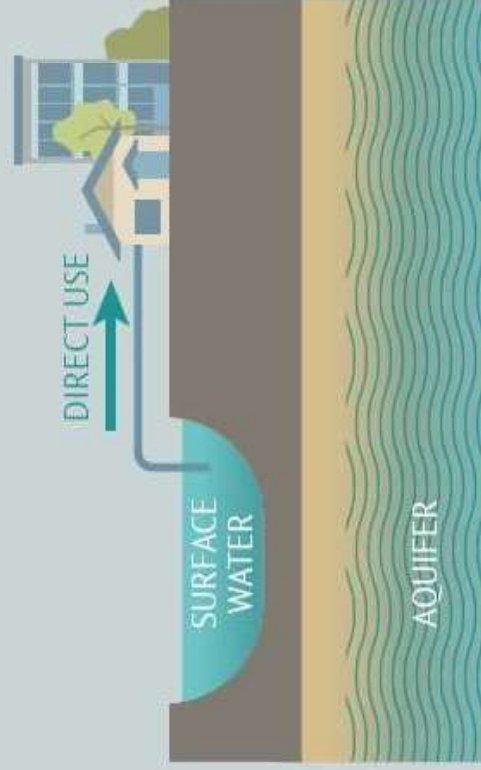
Alternative 3

Direct Use of Flannigan Creek:

Surface water from Flannigan Creek would be stored behind a new reservoir. Water would be pumped to Moscow to be treated and conveyed into the existing municipal water system for Moscow and UI.

Direct Use of the South Fork of the Palouse River:

Surface water would be diverted from the South Fork of the Palouse River, treated, and conveyed into the existing municipal water system for Pullman and WSU.



Alternative 4

Aquifer Recharge from the South Fork of the Palouse River:
Surface water would be diverted from the South Fork of the Palouse River in Pullman, treated, and injected into the aquifer system via recharge wells.

Aquifer Recharge from Paradise Creek:

Surface water would be diverted from Paradise Creek in Moscow, treated, and injected into the aquifer system via recharge wells.

Pullman Wastewater Reuse:
Using treated wastewater for irrigation in Pullman.

Moscow Wastewater Reuse:
Using treated wastewater for passive aquifer recharge in Moscow.

Additional Water Conservation:
Implementing conservation measures resulting in 15% less water than currently being used.

