

Missoula Board of County Commissioners

PUBLIC MEETING MINUTES COVER SHEET



THURSDAY, MAY 29, 2025 – 2 PM

**Hybrid meeting – Missoula County Courthouse Annex Sophie Moiese
Room/Microsoft Teams**

[Click here to view the meeting recording.](#)

Time stamps (in green) correspond to meeting recording above. Please click to
the time stamps listed to view a particular item in the meeting.

ATTENDANCE:

Commissioners Present:

Chair Juanita Vero
Commissioner David Strohmaier
Commissioner Josh Slotnick

Staff Present:

Cheryl Hartman, Administrative Assistant, Commissioners' Office
Mel Fisher, Strategic Initiatives Manager, Commissioners' Office
John Hart, Civil Deputy Attorney, County Attorneys' Office
Chris Lounsbury, Chief Administrative Officer, Missoula County
Patrick Swart, Planner, Planning, Development, and Sustainability
Tim Worley, Senior Planner, Planning, Development, and Sustainability
Elena Evans, Manager, Environmental Health
Kyle Crapster, Environmental Health Specialist, Environmental Health
Charles Shane, Manager, Environmental Health
Anne Hughes, Chief Operating Officer, Missoula County
Kathleen Arthur, Planner, Planning, Development, and Sustainability
Carey Powers, Communications Coordinator, Communications
Brenna Davis, Communications Engagement Coordinator, Communications
Analeshia Rodriguez, Administrative Assistant, Lands and Communities
Katy Reeder, Planner, Planning, Development, and Sustainability
Kevin Dantic, Planner, Planning, Development, and Sustainability
Ian Varley, Planning Manager, Planning, Development, and Sustainability
Kyla Lehnerz, Office Coordinator, Planning, Development, and Sustainability
Brian West, Civil County Attorney, County Attorneys' Office
Vinnie Pavlish, Civil County Attorney, County Attorneys' Office
Michael Tester, Land Surveyor Manager, Public Works
Shannon Therriault, Director, Environmental Health

1. CALL TO ORDER [Time stamp – 0:00]

2. PLEDGE OF ALLEGIANCE [Time stamp – 0:02]

3. LAND ACKNOWLEDGEMENT [Time stamp – 0:09]

Missoula County acknowledges that this event takes place in the aboriginal territories of the Salish and Kalispel people.

4. PUBLIC ANNOUNCEMENTS [Time stamp – 0:17]

- a. Closed Captioning
- b. Proclamation: Pride Month

5. PUBLIC COMMENT ON ITEMS NOT ON THE AGENDA [Time stamp – 3:41]

a. Water Danger Awareness Tips, Commissioner Slotnick

6. CURRENT CLAIMS LIST [Time stamp – 06:13]

Claims list unavailable due to software transition. Next claims list will be updated and provided at an upcoming commissioners' public meeting.

7. HEARINGS

a. Request Commissioners approve the FY 2025 John Engen / Missoula Local Government Building budgets [Time stamp – 06:23]

Chris Lounsbury, Chief Administrative Officer, Missoula County

Commissioner Slotnick made the motion that the Board of County Commissioners of Missoula County approve the FY 2025 John Engen/Missoula Local Government Building budgets for a) Operations and Maintenance and b) Capital Improvements Plans.

Commissioner Strohmaier seconded.

[Motion Passed 3-0.]

[Signed RCA was returned to Mel Fisher.]

b. Fire Bucket Meadows Subdivision [Time stamp – 10:32]

Patrick Swart, Planner, Planning, Development, and Sustainability

[Continued to June 26, 2025 Public meeting]

8. OTHER BUSINESS

[None]

9. ADJOURN

Chair Vero – Called the meeting to adjourn at 4:03 p.m.

BCC Public Meeting June 12, 2025 – Transcription

This transcription was produced by transcription software. There may be discrepancies between this transcription and meeting dialogue. You can view the recording of the meeting on the county's YouTube channel: <https://www.youtube.com/c/missoulacounty> or contact the commissioners' office to obtain a copy.

Dialogue in the transcription attributed to "Sophie Moiese Room" is for all speakers that attended the meeting in person. Attendees that participated virtually are labeled individually.

0:02

One nation under God, indivisible with liberty and justice for all.

0:09

And Missoula County acknowledges that this event takes place in the aboriginal territories of the Salish and Clisbe people.

0:17

We have some closed captioning announcements.

0:19

Cheryl.

0:21

Hello, everyone.

0:22

If you're joining us for this meeting virtually today, instructions for turning on closed captioning are going to be on your screen here in just a moment, Little lag, sorry

0:33

If you are joining us in person, we'll have closed captioning on all the screens here in the soapy movies room.

0:39

There will be multiple chances during the meeting to speak for public comment virtually and in person during those times.

0:45

If you would like to speak, we ask that you use the Raise hand feature.

0:48

If you're on Microsoft Teams, this is the small hand button at the top of your screen.

0:53

If you're calling in on the phone, you'll need to hit *5 to raise your hand, then once called upon, hit *6 to unmute.

1:00

If you have any questions during the meeting, please come and find me.

1:04

Thank you.

1:05

Thank you.

1:06

We have one proclamation.

1:08

Would either of you want to read it?

1:11

You're writing on yours.

1:14

Oh, all right, thank you.

1:19

This is a proclamation for Pride Month, and it's a proclamation of Missoula County and the City of Missoula.

1:25

Whereas, Missoula County and the City of Missoula acknowledged the lasting impacts of

homophobia and transphobia, which have manifested through acts of physical, mental, emotional, and institutional violence against lesbian, gay, bisexual, transgender, queer, intersex, asexual, and two spirit individuals and communities both in the United States and globally.

1:48

AND WHEREAS, Missoula County and the City of Missoula are home to diverse LGBTQI Plus and Two Spirit communities and are committed to supporting the safety, visibility, dignity, and equality of all residents.

2:02

And WHEREAS on June 28th, 1969, the New York Police Department conducted 2 raids on the Stonewall Inn, a popular gay bar in Greenwich Village, using anti LGBTQI plus and two spirit laws such as Masquerade laws to arrest patrons and workers.

2:20

And WHEREAS, these raids sparked neighborhood resistance known as the Stonewall Uprising, led by transgender and lesbian activists such as Marsha Payet, No Mind, Johnson, Sylvia Rivero, Storm Day, de Lavery, Miss Major, and many other transgender women of color.

2:40

And the courage of these activists in the face of violence became a rallying cry, a rallying call for the LGBTQI Plus and Two Spirit rights movement in the United States.

2:51

And WHEREAS, while significant progress has been made toward policy reform and equitable treatment of LGBTQI Plus and Two Spirit People, there are renewed efforts to discriminate and inflict harm upon these communities, making it essential for local governments to stand in solidarity and take action to support these those affected.

3:12

Now, therefore, Missoula County and the City of Missoula do hereby proclaim the month of June 2025 as LGBTQI Plus and Two Spirit Pride Month and invite all residents to observe this month through community programs, ceremonies and activities and by visiting Missoula pride.com sign Andrea Davis, the mayor of Missoula, and your three Missoula County commissioners.

3:38

Thank you Sir.

3:40

Any public comment on items not on the agenda?

3:44

Yes, OK, with the hot summer like temperatures forecasted for this weekend, it will be tempting to get out and our on our rivers.

3:55

And in light of recent drownings in our community, we want to take a moment before we start the meeting to recognize the very real dangers of recreating on water.

4:04

Not just any water, but spring water.

4:07

Whether you're wading, rafting, or enjoying the rivers and creeks from the shore, remember the water levels right now are high, cold and deceptively fast.

4:15

And these water conditions can change quickly, so stay aware.

4:19

Even if the surface looks calm, log jams and underwater debris can be especially dangerous this time of year.

4:25

Missoula Search and Rescue reports that they're seeing more trees and branches in the river and in previous years, largely due to that horrible windstorm we had last year.

4:34

So here are some tips to recreate safely around not just any water, but spring water.

4:40

If you're going to get out on rivers this weekend, recreate in groups.

4:43

Keep a close eye on everyone in your party.

4:46

Check weather reports before you go out.

4:48

Avoid fast moving and murky water.

4:50

And right now, all rivers are pretty much fast moving and murky, so please be careful.

4:55

Know your physical limits and swimming ability.

4:57

Cold and fast water can overwhelm anyone, including strong swimmers, within seconds.

5:03

Look downstream for hazards and have an exit plan.

5:06

Wear life jackets or secure flotation devices, especially for children and dogs.

5:11

Our very own Public Library has children's life jackets to loan out for free.

5:17

Remember that alcohol and drug use will slow your reaction times and judgement.

5:21

Just because you could do it doesn't mean if you you can do it.

5:24

If you're a little tipsy or high, familiarize yourself with river flows and temperatures.

5:29

Use online maps that are available by U.S.

5:32

Geological Surveyor or other agencies.

5:34

And if this is a really big one, if somebody in your party gets in trouble, avoid creating a second victim.

5:39

Keep yourself safe and call 911 immediately.

5:42

Lastly, a little planning and awareness can go a long way towards protecting yourself, friends and family, reducing the strain on 1st responders and search and rescue crews.

5:51

And we love the rivers, but they don't necessarily love us back.

5:55

They won't care if they eat you and drown you and spit you out the other side.

5:58

Be really, really careful if you decide to jump in a river this super hot weekend.

6:03

Thanks, thanks for that.

6:07

Is there any other public comment?

6:13

OK, current claims list is, I didn't realize this unavailable due to a software transition.

6:18

So the next claims list will be updated and provided on an upcoming commissioners meeting.

6:23

We have two hearings, so we'll begin with the local government building budgets with Mel Fisher.

6:32

Good morning, Commissioner Miss Lansbury, the Chief Administrative Officer for Missoula County.

6:36

I'm pitch hitting here today along with Mel who's here to answer questions as well.

6:40

So just a really quick presentation to walk through the budget that I believe Cheryl's going to be able to put up for us here.

6:46

So just as a reminder for folks, the Missoula Local Government Building Special District encompasses just the property that was the old federal building downtown.

6:55

That building was gifted to the county and city together through the formation of this special district by the federal government.

7:01

And each year we present to the governing bodies, which is the City Council and the Board of County Commissioners, the budget for that special district.

7:09

As part of your FY20 budget normal process this last year you adopted a general budget for this because we were unsure what capital construction projects we would be able to begin this year as we kind of went through the assessment phase of what's known as a Browns Fields or is paid for through Brownsfield's grant.

7:26

And so this budget just takes into account the fact that we are not going to be able to be in abatement work in fiscal year 25.

7:32

It won't start till fiscal year 26.

7:33

So we wanted to update all of those numbers and present them publicly so you could formally adopt them into the fiscal year 2025 budget if you'd go ahead and advance this slide there.

7:44

So just a quick reminder here again, the building's located at 200 E Broadway.

7:49

It's known as the Missoula Local Government Special District or the Engen Building.

7:53

Is the building itself in that special district is created through an interlocal between the Board of county commissioners and the City Council?

8:01

Sure.

8:01

If you'd jump to the next slide, So what that budget looks like for this next year for the operations and maintenance of the building is we receive about \$149,000 in lease income from the post office that occupies the front part of that building and then that is divided out to help cover the costs.

8:18

And then the city and county equally split any remaining costs for the building.

8:22

And so in that budget this year, there are some personnel costs related to our maintenance staff who go to make sure that plumbing, heating and all the facilities there that are used by the post office are still in good working order and that the building is safe and secure.

8:35

We also this year temporarily had in there the pretrial service program which will move out in fiscal year 2026.

8:42

So they're occupying a piece of that building as well.

8:46

And then you can see the various other pieces, they're related to the heat, lights, garbage insurance, etcetera for that.

8:53

And then if we jump ahead to the next slide, there we go.

8:56

And then on the capital side of the budget this year we'll spend about \$160,000 on architectural services and then about 80, a little over 8787 thousand, sorry, a little over \$87,000 with Jackson Contracting Group as they get ready to begin that remediation work in this next fiscal year.

9:17

So all total when we look at that, the two sections of that budget, the city and the county will each equitably split approximately \$72,000 from each entity to cover the operations and about \$123,000 each from the two local governments towards that capital improvement section of the budget.

9:36

For this the remain the sorry for the current fiscal year, fiscal year 2025.

9:44

And with that I have a recommended motion for you which is on the last slide after you've had a chance to listen to public comment.

9:53

Thank you.

9:54

Chris, is there any public comment in the room?

9:59

OK, how about online don't see any questions.

10:09

I'm I'm happy I'm happy to make a motion.

10:12

I would move to adopt the Missoula local Government building special District FY20 25 operations and maintenance and capital improvement budgets.

10:19

Second, any further discussion or public comment OK all in favor.

10:25

Aye, Thank you Thank you commissioners.

10:32

OK.

10:32

Next hearing is the Fire Bucket Meadow subdivision with 1st a presentation from Patrick and then the applicant or PCI and then we'll hear from Water Quality District and after all the presentations then we'll open it up for public comment.

11:25

All right, good afternoon.

11:27

For the record, my name is Patrick Swart.

11:28

I'm a planner with the Office of Planning, Development and Sustainability.

11:32

And today we have the 4th hearing for the Fire Bucket Meadows subdivision request.

11:37

I know we just heard all this last week, but for the record, I'll give a quick recap and overview of the project.

11:42

This request comes from Dale Sparks and Tammy Beach who are represented by PCI and the proposed subdivision is, let's see, located at 111 O 9 Fire Bucket Loop to the northwest of the Y interchange.

12:03

The proposal here is for a 5 lot residential subdivision on an existing 19.82 acre parcel.

12:09

Results and density here would be approximately 1 dwelling .3 per 3.96 acres and access would come directly off a fire bucket loop.

12:19

The first hearing for this was held on March 27th, 2025, at which time the staff report was presented, public comments were received and based on those public comments, Commissioners, you requested additional information for on groundwater availability and the potential impact that the subdivision could have on existing neighboring wells.

12:38

Following that, the applicants agreed to provide that information and contracted with Water Rights, Inc to prepare a report to address those concerns.

12:47

The second hearing was scheduled for April 24th of 2025, at which time the water right sink report was not yet complete, so additional public comments were received and the meeting was delayed again to May 22nd of 2025.

13:01

The water right sink report came in on May 12th of this year and following that submittal, the Water Quality District staff had requested some additional time beyond May 22nd.

13:11

So that puts us to today's meeting here on May 29th.

13:16

And as you mentioned, I think the first step we're going to have today is to allow the folks from Water Rights Inc to give a presentation on their report if they're here in the room or online.

13:32

OK, OK.

13:33

Thanks so much, Patrick.

13:36

We'll just hang out awkwardly or Ron did.

13:40

Is there anything that you wanted to introduce?

13:48

I, I think your mic might be off.

13:50

Well, there we go.

13:52

Thank you again.

13:53

Ron, you're with PCI.

13:55

I don't really have a lot to say, but Lee is going to present his, his report and, and talk to you a little bit about that.

14:03

So you should be coming in any minute.

14:06

OK.

14:06

Thank you.

14:54

Hello.

14:55

Sorry, I was having trouble finding parking.

14:57

All good.

14:59

My name is Lee Yellen and I have just a short presentation for you today and to go over the actual report and what I was retained for, so to speak.

15:16

So Lee, you might have to bring that microphone really close to.

15:19

There you go.

15:23

Is that better?

15:24

I'll talk right next to it too.

15:26

OK, let me introduce myself a little bit, give you a background.

15:31

I'm a water rights specialist.

15:33

I've been working in water rights for 45 years.

15:37

I spent 10 years at the DNRC and 35 years as a private consultant.

15:46

I've probably done 15 to 20 aquifer tests and well test and pumping wells.

15:55

I've probably been in over 100 District Court hearings and federal court hearings and water court cases and probably 50 plus administrative hearings before DEQ and DNRC.

16:13

I was retained by the Sparks family and PCI to provide a hydrologic evaluation of the bedrock aquifer up at Fire Bucket loop area.

16:26

So what we first did was to do a literature search to find all the well logs which PCI had already done, but we found a few other ones.

16:36

We also went through all the DNR CS files to find any available aquifer tests since there was no current aquifer tests on the site that's being proposed.

16:53

So we did find 2 aquifer tests that were completed around 2007 by Geometrics.

17:01

And Adam Perrine was a hydrogeologist.

17:04

Adam used to be an old employee of mine.

17:07

I know him quite well.

17:08

He's a very good hydrogeologist.

17:11

So we pulled all those aquifer reports to take a look at him to get actual current data as to what that aquifer was capable of performing.

17:24

There were the two aquifer tests that were done.

17:27

1 was pumped at 1100 to 1200 gallons per minute.

17:31

There were two wells.

17:33

The nearest monitoring or adjacent well that they monitored only drew down 4 feet.

17:40

That's remarkable in a bedrock aquifer.

17:42

But what that tells me is the wells aren't communicating that well to one another.

17:48

So we provided that information along with all the drawdown data and all that data.

17:55

Then we looked at new well logs.

17:57

We found two or three from 2023.

18:03

Those were the newest wells.

18:04

Those both produced 15 gallons per minute and 7 gallons per minute respectively.

18:10

And I guess there's a brand new well, but I don't have the data for that one.

18:20

I was asked to look at water availability for foreign adjacent wells and a look at what the impact of those 4 adjacent wells would be on the neighboring wells.

18:34

So that's why I needed that aquifer analysis besides just well logs to get an idea as to what the connectivity was between the wells.

18:45

The groundwater reports and studies showed that the well yields varied anywhere from three

gallons a minute up to 20 gallons per minute, and that the transmissivity rates were very low, which is what we expect in a bedrock aquifer.

19:07

That means the groundwater movement through the area is much lower and at a slower rate than an alluvial aquifer such as the Missoula Valley aquifer where you have thousands of gallons a minute going through the aquifer where we have about 64 acre feet going through annually.

19:28

This aquifer.

19:29

So it's dramatically different, OK and bedrock aquifers, that's just the nature of them.

19:35

It depends on how much fracturing, how much fissures there are and what the geology of the area is underlying that.

19:48

So we looked at all of that.

19:51

We determined that water is available without impacting the other wells in the area.

19:57

And I know that.

19:58

And I could never pronounce her name right.

20:01

A vision or a vision.

20:05

She has a problem.

20:06

Well.

20:07

So I looked at all the adjacent wells to her well and her well log and she does have a, a, a, a very low yielding well with problems, but all of her adjacent neighbors have wonderful wells.

20:23

So and then looking at the construction of that well, I don't believe the well was properly constructed and it might not be sited in the right place.

20:31

But I, Tammy and Dale provided a map showing all the adjacent wells and the lawns, if I recall correct.

20:41

Did you did you submit that, Tammy?

20:44

OK, so that'll give you an indication that she's got a problematic well.

20:49

But that's not a good showing of what that aquifer can produce because we have so many good wells out there and we have one bad well and we have a couple water quality problems.

21:03

And that's another problem with bedrock aquifers.

21:07

If you have iron bacteria, which the Missoula Valley and the bedrock aquifers have, you need iron filters, you need water filtration, and you need well screening.

21:19

There's only a couple wells out there that are properly well screened.

21:22

Most of the wells are not screened.

21:26

And so that's one of the problems that people are encountering.

21:32

But that doesn't mean there's not water available.

21:38

The water in that aquifer moves from the northeast to the southwest.

21:44

That was determined from the aquifer test.

21:47

And groundwater typically follows the path of surface water unless there's some impeding zone in there.

21:55

So the wells, all the flows from the northeast to the southwest.

22:00

So Don as well if there is any communication which I doubt from the neighboring wells, her problems would be coming from the North East, east and north of her, not to the West of her like this proposed subdivisions requesting.

22:20

In fact, there was a well drilled across the street in 2023 from this subdivision that's producing about 15 gallons per minute and most of the people out there, we pulled aerial photos from every year we could from the beginning of the development till currently most of them have quarter acre to half acre lawns.

22:46

Some of the people that have complained about the subdivision have 20 gallon per minute wells.

22:53

One of the parties that complained about the proposed subdivision on wells just had sod delivered yesterday for probably about 1/2 acre.

23:04

So and then I got comments that one of the parties said that once they hooked up sprinklers, their well went dry and that that has happened.

23:14

That happened to me.

23:15

My myself, I have a well that's a low producing up Miller Creek.

23:20

I don't have a cistern, but what I did on my sprinkler zones as I put in 12 zones as opposed to three or four, and then I have a delay on my sprinkler timer that runs a zone for an hour and then shuts off for four hours and then kicks back on.

23:35

So it takes me over 24 hours to irrigate my property and it's only about 1/2 acre that I'm irrigating.

23:43

But so there are Ways and Means of dealing with this.

23:47

I really need to put in a cistern myself, but that's just the way it goes.

23:52

So let me get into this report a little bit more and explain why I believe water's available.

24:00

And I, I do want to bring up that we were told that we had to have this report a week ahead of time for Miss Evans to review.

24:13

We submitted it 9 days before the last hearing.

24:16

So she had the 9 days, she requested another seven days because she said she needed to review review it.

24:24

And I was a little concerned because that same day she wrote an e-mail criticizing the report saying there was no new data in there, which there is new data in there.

24:34

But then I found out there was a test going on and we specifically asked is there any studies or sampling?

24:41

They said no and it wasn't till one of the people that was not opposed to the subdivision was called to find out if he wants his well tested.

24:53

That's how we found out about the report.

24:55

So I'm A and I've had an hour to review her comments.

25:02

So I don't really think that's fair, but that's a legal matter.

25:06

I'm not going to address any of them.

25:08

OK.

25:08

I just wanted to throw that out.

25:11

So I was also asked to see what the impacts were from global warming and what the future impacts would be to that bedrock aquifer.

25:23

I did find a couple studies.

25:25

One that was the most relevant was in the Northwest United States, and it compared droughts and climate change to water availability and aquifers, both in alluvial aquifers and in bedrock aquifers.

25:44

And it was determined that there was much more impact from global warming on alluvial aquifers such as Missoula's.

25:53

However, this is a really big aquifer, but because they're much more dependent on precipitation and runoff and elevation flows in the river to feed the alluvium aquifer, those aquifers are much more impacted than bedrock aquifers.

26:13

Some of the water in bedrock aquifers is thousands of years old.

26:18

So bedrock aquifers are not as subject to these conditions as an alluvial aquifer.

26:28

And there is a report in there that addresses that issues, but I've been told it it's not in there, but it is in there.

26:36

So I wanted to make sure that people were clear on that.

26:40

So after reviewing all of the aquifer tests I could find, I contacted the DNRCI, talked to their hydrogeologist.

26:52

I called up Adam Perrine, who is the hydrogeologist that did the geometrics reports both for Golden West Subdivision and Y Water Systems.

27:04

And Adam's an old employee of mine, and so I know him well.

27:08

So I went through with him, talked to him about water availability, and I talked to a couple well drillers.

27:18

One of them is Esslinger, who I think believe sent a letter, and he drilled a very productive well out there, and he's had no problem.

27:27

But you've got to drill it properly, screen it, have enough perforations and enough storage in your well.

27:35

And then if you're going to put in a sprinkler system in bedrock aquifers, it's always a good idea to do cisterns.

27:43

So, and I've talked to geologists and builders and water companies and everything I could, everybody indicates that water is available out there in sufficient amounts for domestic use without impacting other wells.

28:05

So the next thing to look at is was the groundwater flow direction where the new wells are going to be placed and what are the wells around that area.

28:16

All of the wells around the subdivision outside of Donna's well are all acceptable for regular loans without the use of cisterns.

28:27

So if you have a well that's under 3 gallons per minute, you're not going to get a regular loan to build unless you have a cistern, just that's the way it is.

28:37

You're not going to get a conventional loan.

28:40

So, but all of the wells around that subdivision outside of hers is over 3 gallons per minute in the vicinity.

28:49

That potentially could be impacted.

28:52

But I'm assuming that through sanitation and DEQ review that some type of aquifer test or pump test will be completed.

29:02

And at that point you'll be able to prove again that these wells aren't communicating with one another.

29:12

My understanding of the subdivision rules.

29:16

Let me get the site on that MCA 76 four dash one O 4 talks about and it's I think it's item E says if a cistern is used water availability is not a concern.

29:37

OK.

29:38

And that's in state statute.

29:41

We are proposing systems, but I expect these wells to all produce over 5 gallons per minute, OK, without impacting one another.

29:51

And I read something, I think it was from Miss Evans that said under sanitation they're going to require a 24 hour pump test.

30:01

And it was my understanding and all the subdivisions I've worked on over the years is that you get preliminary plat approval and then you deal with the issues of pump testing, sanitation for septic and those types of things through the sanitation department or DEQ.

30:23

And so I kind of expected them not to even need me and that they would get preliminary plat approval since there was enough available data and then that would be addressed through the sanitation and DEQ.

30:41

I don't know, maybe the process has changed, but the last few I've worked on, they've all been that way.

30:52

Let's see what I've missed.

30:57

So it's really important and I, I know I kind of briefly discussed this, that we deal with scientific data and not hearsay and not testing that may not be accurate.

31:14

So I understand and I don't know exactly what's going on with a new, they're sampling the wells out there for static water level.

31:24

And I have a problem when you just go out and test as a well for static water level because in bedrock aquifers there's a lot of drawdown from the pumping well and it takes a while to recharge.

31:37

The DNRC requirements for me to do a aquifer test require all wells that are going to be either pumped or monitored for recharge or impact must be idle off for 72 hours, 3 days.

31:56

So if you're going out there and taking static water levels today, depends on did they flush a toilet?

32:04

Did they take a shower?

32:06

Did they turn on the sprinklers last night?

32:08

Is the well in recovery if that wells not off for three days, Whatever static water level you get is not the resting static water level.

32:18

You're either getting pumping water level or recovery water level.

32:22

And that's a very important when we're just hilly nilly so to speak going out and getting static water levels.

32:30

We have to have these wells off and inactive for 72 hours to be a valid test under DNRC requirements.

32:41

So I just want to bring that up so everybody's aware of that.

32:46

And if I'm required to do the the last time there was an aquifer test, a proper aquifer test that was 2007.

32:56

Is that what you said?

32:57

That's correct, that's correct.

32:59

And those, the reason for those is, and that's a big issue that I was going to get into next.

33:06

These are exempt wells.

33:08

And I read in Miss Evans comments that my report only deals with physical availability, not legal availability.

33:17

And legal availability doesn't kick in at all here because you're using exempt wells.

33:23

They're exempt for a purpose.

33:25

And that is listed in 85 two three O 6 of Montana code and it specifically addresses exempt wells.

33:36

Well, you don't have to prove water.

33:40

Physical availability is what you have to prove when you drill your well and you you get your well log and you file your water right.

33:48

If I'm going to exceed 35 gallons or 10 acre feet, I'm required to do a permit for a permit, a whole bunch of criteria kicks in and that is legal availability.

34:00

So you have to address both physical availability and legal availability.

34:06

Legal availability is really difficult to assess because in Montana they don't treat any aquifer as confined.

34:14

Even though we have locally confined aquifers, there is some leakage into deeper aquifers.

34:21

So the DNRC doesn't allow us to treat any aquifer any longer and it's been that way for almost 10 years now that there is no confined aquifer.

34:33

So everything they virtually say is legally connected.

34:37

At some point it may not be very well connected, but we have to treat it that way.

34:44

So on this case we're only doing with exempt wells under 10 acre feet, under 35 gallons a minute and it's not required, but I could prove waters legally available and physically available.

34:58

I just wasn't required to do that because this project doesn't require that.

35:04

But we will get that data.

35:05

If sanitation according to Miss Evans comments is going to require a 24 hour pump test.

35:12

We typically do 72 hour pump test and then we monitor static water level for 72 hours before the test in all the wells, the monitoring well and and the pumping well.

35:26

Then we pump it for 72 hours and we stress the aquifer and then we monitor recharge in seconds and recovery levels.

35:36

That's what's required if you do a permit over 35 gallons a minute and 10 acre feet for sanitation, they may just say do a 24 hour pump test, monitor the static water level 24 hours before, then you pump it for 24 hours and then you you monitor it until it fully recovers to the pre pumping rates.

36:02

That if though for example I was required to do a permit up here say they were exceeding the 35 gallons a minute and 10 acre feet.

36:13

I still may not have to do an aquifer test because I would take go to DNRC and request a variance from the aquifer test based on the two previous aquifer tests.

36:24

And in nine times out of 10, they grant that variance.

36:30

Just so you know, I want everybody to understand the law because I've been doing this for 45 years.

36:36

OK, let's see.

36:46

Yeah.

36:46

So I'm just going to kind of summarize that.

36:49

If you read this report and really only got to read page one in the last page, which is the summary and conclusions, there's water available for four more wells.

37:00

We're not asking for five more wells, 5 lots because there's only one lot on that 20 acres, but only four additional wells.

37:08

The parties that could potentially be impacted would be South and West of this.

37:15

But I'm sure that if I pump, if it's required pump, test the existing sparks well and have a monitoring well, they're not going to be communicating very well.

37:29

They just don't in that area.

37:31

So I don't expect any impact to the existing wells.

37:36

I would be more concerned with developments northeast of this than I would be from this place down or the people down to the southwest.

37:46

But I just don't think when, if and when the pump test is done, we're going to find anything different than what the water system found or Golden West because like I said, they had extremely minimal draw down and they were pumping one well at 1200 gallons a minute and one at 1100.

38:07

And then Golden West I believe has, I think there's somewhere around 120 and 50 gallons per minute wells and both water companies seem to be operating fine.

38:22

I think they've proved water available and I think it should be approved on preliminary plat and let Sanitation and DEQ do their job with their respective of and see what they require and see if it could be met.

38:42

Thank you for your time.

38:44

Thank you.

38:47

Do you guys have any questions for Lee right now?

38:49

OK.

38:51

How long is OK?

38:58

Thanks, Lee.

38:58

OK.

38:59

I didn't know if you had any.

39:00

Oh, no.

39:00

I was asked John a question.

39:02

So Mr.

39:03

Yellen described a, a, a timeline or a progression involving US and DEQ in terms of preliminary plat and when water tests would or wouldn't ordinarily be done.

39:14

Could you speak to that?

39:18

I can try to speak to it, but I want you to know that Kyle Crapster, registered sanitarium from the Environmental Health Department is here and knows a lot far more about that process in me.

39:31

But let me explain a little bit on that issue because Mr.

39:36

Yellen's exactly right.

39:38

Historically, an issue like water availability was something that local governing bodies kind of punted on.

39:49

We said, you know that's and the applicant said it and it was accepted by the local governments of.

39:59

That is an issue that will be addressed by the DNRC and the DEQ after preliminary plat approval.

40:08

The applicant will have to demonstrate to those state agencies that there's.

40:13

Adequate water available and they have the legal right to appropriate it.

40:18

OK.

40:19

That historic system was thrown on its head by a District Court order in the First Judicial District in February of last year, where the judge said to Broadwater County, Montana, no, that's not how the Subdivision and Platting Act works.

40:42

You, the Board of County Commissioners of Broadwater County, have a statutory obligation to evaluate those issues before you grant preliminary plat approval, even though those issues will then be addressed again after the fact by these state agencies, local government entities.

41:08

You can no longer punt on that issue.

41:11

OK, That's a District Court decision.

41:15

It's in the first judicial District, Missoula Counties, in the 4th Judicial District.

41:21

That is not a binding court decision on Missoula County.

41:27

It's what a lawyer would call a persuasive decision, but not binding.

41:33

However, it's my advice to you that that decision was very well grounded in law.

41:39

It's on appeal to the Montana Supreme Court right now.

41:43

And even though I'm wrong at least once a day, I am reasonably certain that these significant aspects of that case, including this notion that local government entities can no longer punt on these issues and rely on an after the fact valuation by state agencies.

42:04

I am nearly certain that that will be affirmed by the Montana Supreme Court.

42:08

And one of the things that the the DNRC stopped doing almost immediately after that court decision was granting something called a predetermination letter, which is something that a subdivision applicant would routinely get in a process like this where the DNRC basically looked at the application.

42:32

Now Kyle may have a better gloss on this than me, but the, the DNRC essentially looked at the application and said that looks like it's going to pass muster in terms of water availability, whether it's an example well or a water right.

42:50

The DNRC no longer does that.

42:53

OK.

42:54

So we don't have any, we, we, we don't have any opinion or position from the state on any of these issues.

43:03

It's your statutory obligation to evaluate these issues.

43:08

Thanks, John.

43:08

That was well, well said.

43:09

Should we see if Kyle was going to ask you, it's a little out of order, but Kyle, would you be able to come up and add to that?

43:22

Yes.

43:22

Hello.

43:22

I am Kyle Krabster registered and sanitarian with the Environmental Health Department.

43:27

I am currently doing the sanitation review for this, so I can maybe speak to how the order goes a little bit.

43:35

Missoula County is a contracted case, what we call a contracted county.

43:38

So we do a lot of the reviews for DEQ.

43:41

Can you bring the microphone?

43:42

Yeah, we're, we're, we're allowed to do certain, we have a contract and, and certain reviews we're allowed to do up to a certain size and various things.

43:52

And this one I am doing part of it.

43:55

Part of it I've asked DEQ to do particularly stormwater because I think it will be a bit complex here, but I have done what I would call the initial review of this subdivision.

44:09

So it was submitted, I could get you the exact dates, but it about a month ago or so.

44:15

In my experience typically these the planning Act and the sanitation reviews.

44:20

So we have are people familiar with what the difference of those are?

44:26

Go ahead.

44:26

Every day is a school day.

44:27

Yeah.

44:27

So through statute, I'll speak mostly to sanitation review 76 four MCA.

44:33

Whenever you develop a piece of property, well, certain conditions, you have to go through sanitation review to make sure you have adequate, you know, water, wastewater, stormwater and and solid waste kind of planned out.

44:45

The idea being that you're not developing pieces of land that or you're not creating pieces of land that couldn't be developed for what their intended purpose is at that time.

44:54

And part of that sanitation review requires an approval from the planning department or the commissioners.

45:00

And so it these things usually happen concurrently, I would say what finishes first would be the planning department review, which we then need to issue the approval for, for our sanitation review and approval.

45:15

But often times in my experience, they're kind of happening at the same time.

45:19

But, but I, I wouldn't say it's inaccurate to say that one would happen before the other.

45:24

But we would need the, the, the planning department review to be approved before we could do ours.

45:30

Part of that, I think is because we need, we don't have a, a public comment period.

45:34

So we rely on public comments here to address and we, we address those and we, we require that we get those so that we can make sure we're addressing public comments.

45:43

And so they're separate things, but in a lot of ways they work together and usually having concurrently.

45:50

Thank you.

45:51

Yeah.

45:52

Could I, could I speak to like the, the, the DNR?

45:55

So the water rights thing is, is John said it quite well.

46:00

In the same way that DNRC decided that they didn't want to get involved in that, DEQ also decided that they've they're no longer looking at water rights as part of the requirement for sanitation review.

46:16

Thank you.

46:18

No punting for us.

46:19

OK.

46:20

Elena did you?

46:22

Thank you.

46:34

Hey, everybody.

46:35

I'm Elena Evans.

46:36

I'm a hydrogeologist.

46:38

I work at the health department.

46:39

I do have a presentation.

46:41

I'm not sure if I could be allowed access.

46:57

All right, so I'm also having Charlie pass out some of the figures that I have because I'm going to walk through them, but they're a little complicated and so this and allows people to kind of take a closer look at them.

47:11

All right, so fire bucket loop and this information.

47:18

There's a couple.

47:19

I'm sorry, do folks in the audience, are they able to see this?

47:24

And I think there's enough copies that should be able to be distributed to the groups too.

47:29

And it'll be on the slides as well for the folks online.

47:33

But just to out outline how we're going to walk through this is I'm going to just, and I am outlining how we're going to walk through this so that we can get to the end point, but know where I'm coming from.

47:47

So oh, it's not moving.

48:23

But it's not going up there.

48:30

Sure.

48:32

OK, OK.

48:58

OK.

48:58

And if you want to hop to the next one, Patrick.

49:07

Oh, Yep, Nope.

49:10

That's great.

49:11

I added some things, but so fire bucket loop, I'm going to start out with what the Water Quality District did previously in the in a study that we did in 2021 and 2022.

49:24

And then I'll go to some of the geology, the differences in water elevation.

49:31

Catch us up, put us back in the context of the Planning and Sanitation Act, Talk about what the water quality District comments were.

49:38

Review the reports that were discussed just today and then also at previous meetings, and then report out about the Water Quality District findings and then talk about next steps.

49:49

Elena, could you put that in?

49:51

Oh, we lost it.

49:52

It's going to stay full screen mode there.

49:54

But well, I'm trying to drive here.

50:00

We're having we'll just hang out for a bit, totally get caught up.

50:27

OK, So in the water quality district, we, we usually try to conduct a study every other year on issues that the public brings up and brings to the attention of the water quality district.

50:41

And and that's to serve our function to ensure that there's high water quality in the area.

50:47

The Y and O'Keefe drainage has long been known to have issues and a lot of those come up in individual developments such as this.

50:57

But given that there were also so much more increased development lately, we started to take a look at it in 2020.

51:06

And so if you see on the left, those are all the wells that were in that drainage in 1960.

51:12

The outline of the stream is the Housing and Urban Development floodplain.

51:17

Before FEMA took over floodplain, Housing and Urban Development did.

51:21

And so that map is there just for reference about where there were historic stream channels.

51:26

You can see there's increased development in 1990 and 1990.

51:30

There were nitrate studies, more water studies in the area.

51:35

The water quality district was involved with working to bring sewer out to some of this area in order to ensure that there were decreases in nitrate concerns.

51:45

And then in 2022 you in 2020, you can see just the the vast increase in wells out there and those are associated as well generally with septic systems.

51:57

Do you want to go to the next one?

52:04

All right, So what we did is we sent out a survey to every address, property and owner in the O'Keefe area to do a survey as to whether or not they had experienced issues with high groundwater.

52:20

There's a lot of clay in the area.

52:21

There were also a number of of stormwater issues in 2018 after we had an inch of rain on on frozen ground.

52:29

And so that's kind of where we started out with our survey.

52:32

So the purple are where folks said, no, we haven't had any issues in the red or where people said they did have issues if you want to go to the next one.

52:43

And so with that, we kind of started to look into the geology of the Why O'Keefe area more because it is particularly different than that of the Missoula aquifer proper.

52:54

And that's a function of this more complex geology, A syncline and how we just have a lot of Tertiary and more clay soils and sedimentary units in this area then we usually encounter in the Missoula aquifer proper.

53:14

And as development pushes further out into that, we were seeing associated issues with flooding, but also with folks having to deepen their well or have pumps fail and things like that.

53:25

So started by taking a look at this and then we'll walk through the next to the next slide.

53:31

But the next three slides are a little too complicated.

53:34

We did present them thoroughly at A at a American Water Resources conference.

53:39

But what we did is we took the well logs in the area and we created 3 cross sections to better understand the geology and try to figure out where people were pulling water from.

53:50

And so, Patrick, if you just want to go to the next one.

53:55

And so that's a close up of those 3 cross sections, one of them goes up to fire bucket loop a little bit, but just shows where we're focused in.

54:03

And then if you want to go to the next one, so this is just an image that we created of a cross

section with different water units and well, with different well log units, sand, sand and clay, cobbles, gravel.

54:18

And they would have different transmissivity.

54:21

Transmissivity.

54:22

Some of them would yield water, some of them wouldn't, some would result in a confined layer.

54:27

And so we were just trying to get a better read on this area.

54:31

And as you can see it between this and the next two slides, there's just a lot of heterogeneity.

54:35

There's a lot of changes and differences across each cross section.

54:40

So let's just take a look at the next one so you can see it.

54:44

There's not a lot of continuity or you can't follow layers across.

54:48

Do you want to go to the next one?

54:51

And so, you know, this just shows that again.

54:56

And then if you go to the next one, this is also a little hard to see.

55:01

But we then reached out to the folks who responded to our survey originally and asked if they were willing to have us measure their water levels.

55:11

So we were going to then do that for a year just to see if we could identify how water levels were changing across the valley and across the year.

55:21

As Josh mentioned earlier this year, earlier this meeting, there is a where spring hydrograph.

55:27

And so as the snowmelt comes off and our rivers get really high, that's when most of the recharge into some of the more surficial aquifers occur.

55:35

And so we wanted to see what might happen as we move through time.

55:39

And so anyone who wanted to could participate in this study.

55:42

And we did pick up a couple of people along the way as neighbors, talk to neighbors.

55:46

But what you see in this slide is that kind of along O'Keefe Creek, a bunch of them are blue and blue was that they were gaining water, blue and red.

55:58

And I apologize for these colors, but blue and red were wear from April to May in 2021.

56:06

Water levels went up and then the orange and the green where where water levels went down.

56:12

So just generally you can see up the middle of the valley where it was more flat and O'Keefe Creek ran more predominantly.

56:20

There was a lot of increase from April, April to May and then changes up kind of where you rose an elevation and we're on the valley walls and more likely to be heavier well in fractured bedrock or more complicated geology.

56:34

We saw losses.

56:36

We also saw some increases and I will caveat that, you know, we did not have people rest their wells for a long time, but we did generally sample in the middle of the day.

56:46

So most people were at work.

56:48

And so that didn't necessarily mean that their wells didn't run, but you know, this was something to get a better feel for the larger area rather than than a very specific test.

56:59

And so we only had a few issues, I think where specific pumping or watering occurred.

57:04

And if if, if the field text went out and there was a sprinkler on or something, when we'd come back around the next day or we'd talk to him about when we could come out, that type of thing.

57:15

So all this is to say the O'Keefe Y study that was done was to better understand the complications in this area and out of that is where we put our comments together to provide comments to planning for the review of any developments in this area.

57:36

So if you'll go to the next slide, please.

57:40

And so the water quality district, you know, we were doing that study outside of any specific review, but I wanted to bring us back to the Planning Act versus the Sanitation Act.

57:51

John and Kyle had great comments.

57:52

But something that's important in this context is that the the Planning Act is where water quantity and the impacts that any future or proposed development impacts may have on neighboring properties can be considered.

58:10

Whereas under the Sanitation Review and Act that just deals predominantly with the availability of water on that property for the use of that property.

58:23

So the the plotting act is where impacts to neighboring properties is able to be considered.

58:32

OK next time.

58:34

All right.

58:35

So the original water quality comment was on the basis of that O'Keefe Y study and it was pretty general because it it did.

58:43

It is something that we say generally about that area given our study.

58:47

And it was that the proposed subdivisions in an area of artesian wells in an area with changing groundwater levels, some water levels and wells are increasing and others are needing to dig deeper to access water.

58:57

Development of new septic system, alteration of storm water and cut filming impact neighboring properties as more clay and gravel lenses can be highly sensitive to change next one.

59:10

And so the public comments from neighbors when it comes to the water quantity issues and water quality in in some aspects where that we're reflected more broadly in O'Keefe Y as well in that some properties have multiple wells due to insufficient yield.

59:26

And that's something that's in other areas as well where there's three or four wells on a property.

59:32

Elena, can you go back one slide?

59:34

Sure.

59:47

Thank you.

59:51

So, yeah, so the public comment kind of further refined the question at hand and it is reflective of what we saw in the area and also reflective of what we saw in the study, but certainly more particular to what we saw up on the sides of the valley as compared to a Long O'Keefe Creek proper where most of those artesian wells and high groundwater were identified.

1:00:15

And so just highlighting that some properties have multiple wells due to insufficient yield, cisterns are needed to ensure sufficient water supply and that lawn and water use is often curtailed in the summer.

1:00:28

Pumps are replaced frequently and there was a general concern around insufficient water availability.

1:00:34

Next slide.

1:00:36

So the request was for Water Rights Inc to address those concerns.

1:00:40

And as we heard a little bit earlier, there was a lot of discussion or conflation between legal availability and physical water availability.

1:00:51

I did have a conversation with Ron about how we really wanted to just focus on physical availability when it comes to water rights.

1:00:58

Most of the basins in Montana are over allocated and because of the exempt well issue, not well quantified in terms of what water continues to remain available and as a function and part of what John discussed with the Broadwater decision, that decision kind of is held until later until DNRC reviews it.

1:01:22

And so that's outside of the scope of what we're really talking about here because the concerns brought forward weren't about legal availability, they were about the physical water availability.

1:01:32

And so within the water rights report, I just reviewed the content as it pertains to physical water availability.

1:01:42

And so one of the ways in which that was discussed was using aerial imagery on lawns, talking about the lawns without accepted spectral analysis procedures.

1:01:54

So you can just look at an image, but if you want to scientifically understand what's going on in terms of like plant biomass or respiration or water available on the landscape, there's actually a lot of great technology and like satellite imagery from NASA.

1:02:11

And you're able to use different wavelengths to identify how much water is there in a way that's well accepted.

1:02:18

And that wasn't done in this case.

1:02:20

And so it it can't really be used as a factor in, in this understanding of whether or not it's a measure of physical water availability.

1:02:33

And then there was cited literature and pump tests, but those were primarily from the Missoula aquifer instead of these kind of side of valley aquifer units that are more complicated than the Missoula aquifer.

1:02:48

And so it, it's useful if you're in the Missoula aquifer or at a lower elevation, but not necessarily pertinent to the discussion about how much water is available in this area, in this very specific area.

1:03:04

But it was great to have more compiled well log information.

1:03:08

And if you want to go to the next slide like that.

1:03:13

So it's a plan form looking down on a map and all of the information that was provided by the well driller.

1:03:20

So the people who drilled the well and how that well was doing at the point in time that that they that they drilled it.

1:03:27

And so in a lot of cases, that was when these houses were built in the 90s and 2000s and things like that.

1:03:36

And as we saw in those earlier slides, there's just a lot of new developments since then.

1:03:41

If you want to go to the next slide, So this is a, this is from that 2021-2022 study of Don Evison's well.

1:03:51

And really what we measured was the depth to water.

1:03:55

So those blue lines show how far we had to take our water tape down to reach water.

1:04:00

And what you see is in April we it was 117 feet down and then in September it was 155 feet down.

1:04:10

And So what that shows is that as the year moves on, we're really seeing some seasonality in this area and a drawdown of of 38 feet.

1:04:20

And while there could be a little bit of nuance depending upon use, it's it's pretty steady in terms of how the water levels move down South.

1:04:28

You know, there could be a variation of a foot or two, but we are seeing seasonal variation and the impact of people using more water in the summer and, and that impact on that local aquifer and where it's standing.

1:04:41

OK, next slide.

1:04:44

And so it was helpful to have the Howard Newman report where 16 well logs were reviewed.

1:04:53

And some of what he said is, is useful in terms of also helping us with the context of of this understanding here.

1:05:02

And that's that depending on the location where a well is drilled, water bearing unit could be 10s of feet thick or it could be quite thin.

1:05:09

So just acknowledging that complexity that we saw in a lot of those geologies that we saw earlier.

1:05:16

And then based on a few of the well logs, some of the more permeable units appear to connect to be connected and can transmit and receive water from other units.

1:05:24

So while there are potentially some confining units in the aquifer, there's also some that may transmit water across what what might not be considered an aquifer unit, but water still goes through it.

1:05:36

And so there's aquifer units where you can pull water out and it moves water around.

1:05:40

And there's other ones that are just like you wouldn't put a straw in it to suck water out of it, but it's still moving water back and forth.

1:05:47

Does that make sense?

1:05:48

So there's, there's like a really hard cap, a confining layer that's like pure clay and, and something like that.

1:05:56

Or there's more gravel lenses in there or in areas like this that are bedrock or the contact of bedding units is like a fracture unit that transmits water more readily.

1:06:10

And so it's, it's just more complicated here.

1:06:14

And Howard's report reflected that too, that well, there may be some confining units, there's also likely some that communicate to one another and then talked about how, yeah, wells communicate with one another.

1:06:27

So next slide.

1:06:31

OK, another complicated figure, but essentially this shows the digital elevation model.

1:06:38

And so, so far we've just talked about things on a flat map, but if you ever drive up to fire bucket, you know that you're driving up a pretty steep slope.

1:06:46

And So what that means is we need to take into account elevation when we're considering depths to, to water.

1:06:52

So Howard's report talked about how one well has a depth of water of, you know, a lot of feet and the other one has less feet.

1:06:59

And that's important to know cuz then those may, may or may not theoretically be in the same unit.

1:07:05

But it also depends on how high up the start of that well is.

1:07:08

You know, if you have a straw here and it starts here and you have a straw here and it starts here, you're not coming.

1:07:14

You're not drawing from the same point.

1:07:16

And So what this is showing you is just further over on the right is where that 2007 Geomatrix water report was for the Y Water Company and how it's considerably different when it comes to elevation.

1:07:29

So if you want to go to the next one.

1:07:32

So again, this is that well information from the well drillers and it's important to know that those wells went in at different times of the year.

1:07:42

So I just showed you that there's seasonality with Don as well.

1:07:46

And then there's also changes in performance over time.

1:07:49

And we heard that from folks who testified that their water decreased or they were having more problems, things like that.

1:07:55

And so what's important is that it was great to have this information together, but what does it mean compared to one another?

1:08:02

How can we see if things might be drawing from the same aquifer unit?

1:08:06

So go ahead.

1:08:08

And so this is busy, but this is the point that we're getting to.

1:08:13

So there's elevation on the on the sides and that's in 10 feet at a time.

1:08:19

And that one on the far left, that straw that's going the deepest down, that's the Y Water Company.

1:08:26

And so that's where that aquifer test was.

1:08:29

And if you look over to the right, that's where the other wells in that area are drawing from.

1:08:37

And so this is just to say that that aquifer test is, is significantly lower and considerably further away from from what we're looking at.

1:08:47

And and it's also not necessarily in the same kind of bedrock complicated geology.

1:08:54

And so this is also just showing you how important elevation can be in understanding what depth to water means.

1:09:02

And then that then also what the depth to where the the casing is.

1:09:09

So the casing, there's a straw, it's this deep, but it's only pulling water from here.

1:09:14

This is where the perforations are.

1:09:16

And so we got to look at a couple things, not just the well logs, but also put them in the context of one another in order to be able to compare them.

1:09:24

All right, next slide.

1:09:27

So this is just zooming in a little closer on fire bucket loop elevation.

1:09:32

And so it's just showing you on that digital elevation model with red being higher and green being lower.

1:09:37

But there's a broad range in elevation just within this localized area too.

1:09:42

And so even if someone up high has a really deep well, it could be in the same aquifer unit potentially as someone who's lower down in elevation and has a shallow or a well.

1:09:53

So that's what we'll show you on the next slide.

1:09:57

So this is kind of a similar image to what I just explained with elevation intensive feet on the Y axis and then these different wells outlined across the side.

1:10:12

What I've added to this one are there's little XS or those white lines in there.

1:10:17

That's where it's perforated.

1:10:19

So those are the areas that it's drawing water from and that's important because that's the aquifer unit that it's like pulling water from.

1:10:27

And then the other thing to draw your attention to is the dark blue is what was on the well log and then the light blue is what we measured ourselves.

1:10:38

And so you'll see that a number of these wells are, are considerably different and that's not unexpected just because wells change a lot after you run them for a while or after, especially in bedrock, a lot of the, you know, iron or minerals or finer sediments come in and can either fill up the well a little bit or just different flow paths open.

1:11:04

Sometimes also wells if an, if a well gets put in next door, it can impact where the water level is.

1:11:10

So we just wanted to check in with that and that's what we did.

1:11:14

We had hoped that the the reports by the consultant would bring in that information, but they didn't bring new information to the table necessarily when it came to water levels.

1:11:25

And so we just wanted to make sure that we were comparing apples to apples with caveat with a few caveats in there, obviously.

1:11:35

And you know, we're happy to measure anyone, anyone's well out there.

1:11:40

It's just given that I was headed to a family reunion and we had limited time and we wanted to keep this going, it was easier to have those who testified or reached out sample their wells.

1:11:53

But that's certainly open to anyone who's interested.

1:11:57

OK, next slide.

1:11:59

So this is a hypothetical, but let's say because that blue one in the middle is the well on site, the the current well on site for the development and those lines are where it's screened.

1:12:12

So let's say that yellow bar that came across the bottom is the aquifer unit they're pulling from, then it crosses two of those other wells there.

1:12:22

And so potentially, and this is hypothetical because we don't know exactly and we haven't done a

test in this area, but that's why it's important to have the elevations of where the wells are screened and then also have an identification of if other wells come down because then that would indicate that they're in the same aquifer unit.

1:12:42

OK, thanks.

1:12:46

Next.

1:12:47

Oh, OK.

1:12:49

Well, if you want to go back, then, OK.

1:12:53

So just because I drew a hypothetical box across one layer of the aquifer doesn't mean that there aren't also fractures or anything that may impact those water levels that are higher up.

1:13:07

Because as Howard Newman discussed in his report, it's uncertain as to what aquifer units are like communicating with each other or transmitting water back and forth.

1:13:19

And that's something that's more complicated in bedrock aquifer formations and in this complicated geology.

1:13:28

And So what we have happening next is in the concurrent process of sanitation review, Kyle has asked that there be a 24 hour pump test.

1:13:45

And the Water Quality District has offered to monitor water levels while that 24 hour pump test occurs so that we can help in identifying whether or not neighboring wells are drawn down or not, whether or not some of the neighboring wells are drawn down in association or anything like that.

1:14:11

Yeah, just for clarification.

1:14:12

So that pump test, would that be on the Sparks well and adjoining wells?

1:14:17

So it would be a pump in the Sparks well and then we would monitor neighboring wells to see whether or not water level came down.

1:14:28

I did like Lee's suggestion that potentially there could be a 72 hour test and that they would then monitor those neighboring wells.

1:14:36

And if they were interested in seeing if neighbors would be willing to turn off their water for a certain amount of time while it's measured, I think I think that's great.

1:14:44

If they'd like to do that, that would be even more robust of an analysis necessarily than the 24 hour pump test.

1:14:51

But I think it is important in terms of considering impacts to neighboring properties that although the sanitation pump test usually happens after the plotting act, one that in this case, given the concerns of residence that it is done so that it can be considered in this analysis.

1:15:13

Thanks, Brian.

1:15:14

And I, I guess I would, I would say that, that in the, the spirit of the, the judicial and, and, and kind of changes as it relates to state law and, and our role, it's important to get that now and no more punting.

1:15:37

Thanks.

1:15:38

So, Elaine, would, do you believe that the Sparks well would be an accurate proxy, a representation of wells that do not yet exist, but would be drilled on the proposed new, new chunks of land, new plots of land if this subdivision were to happen?

1:15:58

I it's a good start.

1:16:01

I don't think that a pump test with the existing wells could necessarily say for certain as to whether or not there would be impacts for future wells at this point in time with the reports provided by Water Rights and Howard Newman and then what we were able to quickly pull together, there's just limited water elevation data and this is a very complicated area.

1:16:25

Thank you.

1:16:28

Sorry to interrupt.

1:16:29

Keep going.

1:16:30

No, this is that's actually I just want to say thank you for doing this deep, deep dive.

1:16:36

It's super important that we have this information and we appreciate it.

1:16:40

Thanks.

1:16:44

Thank you.

1:16:44

Can we ask questions in a in a moment when we have public comment?

1:16:53

But because we've got an hour 20, do folks want a quick three minute bathroom break?

1:17:00

I'm going to take 1/3.

1:17:34

Oh yeah.

1:17:47

OK.

1:17:48

So OK, so we'll begin public comments and I guess this wasn't made clear the last few meetings on this week want to make sure that we're concise with our comments.

1:18:20

So we're going to be more firm with the the three minutes here and be helpful if we're not repeating ourselves and then direct your comments to us.

1:18:32

We don't want neighbors direct, don't direct neighbors, don't direct your comments to neighbors or staff in the room and you can direct them to us.

1:18:43

And then Lee, you had a question about can you ask questions?

1:18:46

It would be better if you would put those in writing so we can get you real answers that aren't by the seat of our pants.

1:18:54

And we're not hydrologist.

1:18:55

So if you could write them down, that would be useful here.

1:19:02

We'll, we'll, we'll, we'll get through this first and then they'll, they'll be more after public comment as well.

1:19:09

OK, public comment.

1:19:12

We'll begin with anyone in the room.

1:19:15

Come on up.

1:19:17

And it's also really important that folks have signed in in the back and, and print your names legibly and your e-mail and phone number so we can follow up with you.

1:19:30

OK, my name is Zach Van Zandt.

1:19:32

This is the this is the three minute.

1:19:34

I'll be real quick.

1:19:35

It'll get started, get back to work.

1:19:36

So I'll make this quick and I'll be right out of here.

1:19:39

My name is Zach Van Zandt.

1:19:40

I live on fire bucket loop.

1:19:41

I talked to you a few months ago.

1:19:43

I have had concerns about water for years.

1:19:45

I've lived there for 25 years and seen water wells, etcetera.

1:19:49

And like you said, I'm not going to repeat all that Mister Lee's report where he talks about water in the area and even met it at his own home.

1:19:58

Sprinklers and my time regulating.

1:20:00

And I know in his report it states I have a very nice lawn in my house.

1:20:04

My sprinklers are set for 10 to 15 minutes with an hour break in between.

1:20:09

I should have only 3-4 zones.

1:20:10

I've got 8 almost 10 zones for that area because I have water problems.

1:20:16

I know that the well log states I get 20 gallons a minute.

1:20:19

I have implemented and asked Montana.

1:20:24

Western Montana pumps to do a well test to prove my well does not produce that I had to put a cistern in.

1:20:31

I don't spend that type of money needlessly on my home.

1:20:34

I don't wastewater.

1:20:36

I grew up in a home you'd be respectful of others community and what you have and that's kind of point on drive home.

1:20:45

Like I said, won't waste your time.

1:20:46

Hope you have a good day.

1:20:48

Thank you, Zach.

1:20:54

Anyone else in the room?

1:21:00

Good afternoon everyone.

1:21:01

My name is Ron Ewart.

1:21:02

I'm with PCI.

1:21:05

Lee had mentioned a a well that was the most recent well that was drilled and he didn't have the well log, but I have it here.

1:21:13

It's the Vandervoort well on Leesman Lane and it was drilled a little over a year ago, 20 gallons per minute.

1:21:21

So there's a lot of different things being said.

1:21:26

There's different laws in place and it's you know which, which rules do you follow?

1:21:32

I know state law states that if you use Sisters then you don't even have to prove water availability.

1:21:37

But here we are going above and beyond.

1:21:40

So when we first submitted the packet, the information that we put in, it was far more and for any other subdivision that I've worked on and since then because of public comment and we did listen very intently, we provided much more information by hiring Howard Newman and and Lee Yellen.

1:22:04

I think that Missoula County is fortunate to have such a robust program through the health department and the water quality district is staffed with educated, knowledgeable people, and it's their job to review subdivisions for sanitation and water supply.

1:22:23

And so I'm just asking to let that process play out.

1:22:26

You wouldn't be punting because they work for you.

1:22:29

Everybody's all kind of in one, one circle here.

1:22:32

Now, if we were out in Tool County or something, that would be completely different.

1:22:35

But we've agreed to, you know, multiple delays, multiple public hearings, we've agreed to presenting and hiring out more information and we have agreed to this pump test and we would like to work closely with the with the health department of water quality district to move forward.

1:22:56

And and, you know, after preliminary plat approval, it's one thing I've sort of been thinking about is the president is this would sit.

1:23:05

I mean, there are a lot of other places in Missoula County where groundwater is little iffy here and there.

1:23:13

So it was just going to have to happen on every one of these.

1:23:15

I mean, you go South of Lolo, same way Miller Creek, just about everywhere.

1:23:20

This same formation goes clear out to Frenchtown.

1:23:25

So, I mean, there's a lot of things that we need to think about, but I would just urge you to, to reflect upon all the information that we have submitted a lot of great information and, and, and just allow us to move forward in the process and, and not penalize these nice folks, Tammy and, and Dale.

1:23:47

They've tried to do everything by the book, I mean strictly by the book.

1:23:52

And, and this is a way that we can all work together and, and just move forward.

1:23:59

Thank you.

1:24:00

Thank you.

1:24:13

Commissioners I'm Gordon Schmidtel again live on Leashman Lane 3 minutes.

1:24:18

I've been working too so and I I got to get out of here as well, but I'll make it very quick.

1:24:23

You saw the graphs on there, I believe when, when they presented the tracks to be built, a track 1-2 and three track one, there were there's a building envelope and there is where the well might be placed kind of deal.

1:24:41

And, and I would, I would urge you to take a good look at where my well is AT and where these other wells might be set in place.

1:24:51

And they could vary in, in every in, in different aspects, but they're going to be in that general area.

1:24:57

And if you look at DNR, CS work on on that graft, I mean there could be a possibility that my well will connect with someone else's.

1:25:06

And with the drawdown, I may or may not be sustained water.

1:25:12

I filed my water rights.

1:25:13

I have water rights.

1:25:14

So I want to know if these wells do get put in and down the road two other tracks get put in because this is being developed as a minor development.

1:25:25

What are my recourses?

1:25:28

I that's what I want to know.

1:25:30

What rights do I have to fight that and how do I do it?

1:25:33

I can't fight DEQI, can't fight DNRCI, can't fight these people.

1:25:38

I don't have the money for that and neither do my neighbors.

1:25:42

So how do we go about that?

1:25:44

Do I sue you guys?

1:25:46

Who do I who who who fights for me and my rights?

1:25:50

So again, water is the issue out there is a huge issue.

1:25:56

I think there's a little bit of, I think sneakiness getting this approved as a minor.

1:26:03

That's one thing.

1:26:04

But water is the issue.

1:26:06

They are that you guys go forward and approve all this stuff.

1:26:09

But we're I'm I'm probably talking for most of my neighbors, water is a huge force.

1:26:15

It's liquid gold out there and it's it's is it viable?

1:26:19

Is it sustainable?

1:26:21

Is it reliable?

1:26:22

So I'm it's in your hands, so please take a hard look at it and and I guess we'll have to go off of what judgment you decide to do.

1:26:34

Thank you thank you, Gordon.

1:26:50

Hello commissioners.

1:26:51

Thanks for being here.

1:26:52

I'm Tyler Gordon.

1:26:53

I work on or I live on fire bucket loop.

1:26:57

We moved in in 2019-2020 2.

1:27:02

We got sprinklers because we we're told and our our paperwork stated 12 gallons per minute so that's how we had it figured out.

1:27:14

Within the first week we figured out that that was not the case.

1:27:18

We after just a couple days I didn't notice but the sprinkler started purging and then mud was starting to squirt out.

1:27:27

It was just a bad deal.

1:27:31

Sounds like they got a picture of me and my sod yesterday.

1:27:37

Wasn't a half acre.

1:27:38

It was it was 3/4 pallets at 500 square feet apiece, so 2000 square feet.

1:27:45

I got delivered for my dog and my kid to play on.

1:27:48

Hopefully I have enough water for it.

1:27:51

That's what, 120th of an acre?

1:27:53

It's not quite half of an acre.

1:27:58

But as you can see in that picture also that there is a ton of weeds.

1:28:02

I mean it's it's a weed land up on that hill.

1:28:09

If you go look or take some pictures in August, I guarantee you'll see different pictures.

1:28:14

Obviously it's May.

1:28:15

It's beautiful out right now every everything is green.

1:28:21

I have 2.6 acres.

1:28:22

I'm trying to utilize 5% of it if the water will allow me to and we'll see.

1:28:28

I'm just trying to get rid of my weeds and IA little bit of sod.

1:28:32

Hopefully won't won't hurt.

1:28:34

I just want to make sure who's going to be held accountable if this decides to ruin all of our water in the neighborhood and what is the recourse for all of us on that hill because we all have this issue.

1:28:53

12 gallons per minute?

1:28:54

I doubt it.

1:28:55

It's not even close.

1:28:57

I have small zones on my underground sprinklers and I got to really watch it.

1:29:04

I turned on the sprinklers last night after I laid about 1000 square feet along and my my wife decided to come out, start yelling at me because she was in the shower and she said there's no pressure.

1:29:13

Anyways, thank you for your time.

1:29:15

Have a good day.

1:29:15

Thank you, Tyler.

1:29:24

Anyone else in the room?

1:29:28

OK, we have no more public comment in the room.

1:29:31

Come on up.

1:29:32

I was waiting.

1:29:34

No go, go ahead in in the back.

1:29:47

Yeah.

1:29:48

My name is Sarah Curtis.

1:29:50

I live at 11800 Fire Bucket Loop and it's it's the same.

1:29:56

I'm not trying to waste your time.

1:29:58

I do know from doing our own developments where you have a commercial development that we have worked with the county on just in the last few years.

1:30:08

It's no fun going through all of the hoops and the water and the DEQ and them running thousands and thousands and thousands of gallons of water on the ground just to prove that you have enough water to do your development.

1:30:23

It hurts a little when we have such little water at our home to see all that wasted water in a different area.

1:30:34

Since it is a minor subdivision, DEQ doesn't have to be involved is my understanding of Missoula subdivision regulations, and I just had a few things that I picked out.

1:30:45

Just reiterating, we are curious maybe from the county deputy attorney's standpoint, what recourse do we have if our water goes away after wells start being drilled?

1:30:59

I am 100% on board for not using water while they do a well test.

1:31:03

If Elena's request gets submitted through, we're up for a 24 hour pump test.

1:31:13

We're not trying to pick on anybody.

1:31:15

We are truly just wanting prove them to prove as subdivision requirements ask for quality and quantity of water available on that area.

1:31:28

Thank you.

1:31:29

Thank you, Sarah Lee.

1:31:36

OK.

1:31:36

I just had a few little quick comments.

1:31:41

1 is a disagreement with Elena that the Y River or Y water system is not the same bedrock aquifer.

1:31:51

That's not correct.

1:31:53

You can look at the well log and you can look at any geology map and they all show exactly the same geology of that area.

1:32:01

So I wanted to clarify that there was another statement about wells screening and that wells were screened.

1:32:14

There are no screened wells that I could find up there.

1:32:17

And that's a problem because that would improve a lot of the water quality and water availability.

1:32:24

You're able to get a lot more production out of a properly developed and screened well then you are from just a regular drilled well without any screening.

1:32:39

The last thing is that the water appears to be available and there's been a lot of development as Elena's report showed.

1:32:53

And most of that is up to the northeast and east of this.

1:32:58

But it is a growing area and there are more wells going in and one of the things on bedrock aquifers it, it is difficult cause each well may be substantially different.

1:33:13

But collecting more data is always good.

1:33:15

I don't mind that.

1:33:17

But I'm pretty sure, and I bet my reputation on it, that I'll drill though we could drill those four wells and we won't be able to impact either one of those four wells we drill, let alone any of the other ones.

1:33:30

So I don't like speculation.

1:33:33

I like hard science and facts and aquifer test.

1:33:38

And then I wanted to address people's concerns about water disputes and water availability because that's what I do for a living.

1:33:47

In fact, I'm going to court next week on another one, and I'm usually in court twice a month on water disputes.

1:33:55

And we're all treated the same.

1:33:57

So we all have our water rights.

1:34:00

We have to defend them against any future user.

1:34:05

So if you can prove you are impacted, you file it.

1:34:09

First, you file a complaint with the DNRC.

1:34:12

So that's step number one.

1:34:14

Step #2 then is if DNRC takes it on, they'll address it and they'll do an investigation on old historic water rights pre 73.

1:34:27

DNRC will not touch those, so that has to be held in District Court, but there are statutes and water use complaints for that.

1:34:38

Thank you.

1:34:38

Lee, anyone else in the room?

1:34:48

My name is Jeff Silkwood.

1:34:51

I work with Lee and just have a couple of minor comments on Elena's report.

1:35:00

So 25 years ago I worked for the University of Montana on a NASA project under Professor Steve running on the MODIS project, and the resolution on the Terra satellite is 250 meters per pixel.

1:35:22

It's not what we use now.

1:35:25

The standard we use is to take aerial photos and use the irrigation water requirements based on NRCS data.

1:35:41

And that's what we did in this report.

1:35:46

That's it.

1:35:47

Thank you, Jeff.

1:35:56

Hi, I'm Dale Sparks.

1:35:59

I just wanted to say from the beginning of this, I don't want to downplay anybody and their concerns about their water, about their views, about the road, whatever it might be.

1:36:17

We took a lot of time to review it.

1:36:20

We went through all of the requirements, followed what PCI said because they're the experts in this and and brought this to the table.

1:36:30

I understand people talking about what do we do?

1:36:33

If I can say my water's fine.

1:36:36

They say there's, there's isn't.

1:36:38

We have a lot of people that are complaining and it's hard to read that as AI don't want to see my neighbors complaining.

1:36:45

I don't want to see him upset.

1:36:46

But I also have just as many neighbors that have told me they're OK doing with what we're doing.

1:36:52

The way we've drawn it up.

1:36:53

They just don't want to get involved because they have neighbors too, and you tend to get that response.

1:36:59

All I know is when we follow process the way that we're supposed to, all I'm trying to do, there's a lot of property up there that's been developed out of those parcels over time.

1:37:10

Everyone lives in a home up there because of that.

1:37:14

We just happen to own property and I'm trying to exercise my property rights.

1:37:18

That's all I'm trying to do.

1:37:18

I'm not trying to hurt anybody.

1:37:20

That's why we have to follow the rules.

1:37:22

That's why we've been open to consistently working with, you know, the county.

1:37:27

If we need to push back time a little bit or get other reports, we were fine with that.

1:37:31

We just wanted to stick to process.

1:37:34

But it's not trying to hurt anyone.

1:37:38

We're just trying to protect our rights, too.

1:37:39

I appreciate you guys time.

1:37:41

Thank you.

1:37:41

Dale, I thought, Charlie, did you have something?

1:37:47

Yeah, if it's all right if I make a comment.

1:37:55

Hi, I'm Charlie Shane with the Missoula Public Health.

1:37:58

I'm an environmental health manager there.

1:38:00

I just wanted to speak really quickly on or clarify some of the comments made on, on cisterns.

1:38:07

So, so we heard a couple times that if, if a cistern were proposed, then there would be, you know, no requirement for any sort of review under sanitation and subdivision.

1:38:16

We review water supplies through DEQ Circular 20 and and what that states is where the sustained yield from a groundwater source cannot meet the minimum flows in in two point 1.1, which would be 10 gallons per minute for an individual well over the course of one hour, 6 gallons per minute over 2 hours or 4 gallons per minute over 4 hours.

1:38:40

Then the let me pull this up real quick.

1:38:44

Then a supplemental cistern designed and in accordance with this chapter may be used if the sustained yield is shown to be greater than or equal to the irrigation volume plus three times the daily day demand.

1:38:54

And the applicant demonstrates the sustained yield through well logs and testing of nearby wells or through a pump test.

1:39:00

And it goes on to kind of describe how that is done.

1:39:03

And so I just wanted to clarify that there is a is a process for testing wells even if there is a cistern unless of course that is a hauled water cistern, which is where they were trucking water and not using any sort of groundwater.

1:39:16

At that point there is not any sort of review.

1:39:18

But if they're using a well and filling the cistern, then it actually has in some ways, a more robust review than just a single well without a cistern.

1:39:28

Thank you.

1:39:29

Thanks for that clarification.

1:39:33

Anyone else in the room?

1:39:38

OK, we're going to move to online And.

1:39:43

OK, Donna Evison, you have 3 minutes.

1:39:50

OK, Thank you.

1:39:51

Can you hear me?

1:39:52

Yes, OK.

1:39:53

I just wanted to make a comment about what Elena talked about when she was talking about the satellite imagery and landscaping.

1:40:04

What you put in and I mean other people use irrigation.

1:40:09

I do not use irrigation.

1:40:11

But what you see from the sky is Evergreen carpets that are deep rooted, not a lot of grass trees.

1:40:22

That are also deep rooted then you then and pine trees and I do water those things, but that's all from collected snowmelt and runoff from my roof.

1:40:35

So when my well when they show my well going down to a level that's like 155 and or or there that's all from home usage.

1:40:46

That is nothing to do with watering landscape.

1:40:50

All the landscaping that I have is watered through what I collect from either snow melt or rain runoff.

1:40:58

I'm hoping we get some rain.

1:41:00

And so my well would be 1 and I will be very happy to not use my well in order to, to complete a study.

1:41:11

And also, I think it was interesting that like Shelly Stennerson across the way, she had an one of her wells was abandoned and they took a level on that one.

1:41:22

And I'm just curious about other abandoned wells like those that are up at Fred Lane that are relatively close to us.

1:41:29

And I'm not sure how their, you know, water levels or lenses, whatever you guys were talking about where the water is, how that works into this.

1:41:38

But that whole area has multiple abandoned wells and have to pump water in from a from down in the aquifer.

1:41:48

So that's all I have to say and I'm willing to take part in any study that you folks have.

1:41:53

Thank you.

1:41:55

Thank you.

1:41:55

Donna, I only see one page.

1:42:01

Sorry.

1:42:04

OK, Thank you.

1:42:07

OK, we're going to close public comment discussion.

1:42:11

Yeah, this is question for John.

1:42:17

So listening to all this, especially given that it appears that the Sparks well cannot be a representative sample for the four wells that would be drilled on the additional new 4 parcels.

1:42:28

Would it be possible to condition this upon those 4-4 test wells being drilled, one on each of those parcels and then monitored to see how productive they are and simultaneously monitored to see what the impact is on the neighbors.

1:42:44

And if the wells are productive enough and there isn't an impact on neighboring wells and we'd come up with some metrics, not just me saying this, then we would, then it would move forward or cisterns and hall water, either of those would be an acceptable condition.

1:43:01

Is it possible to condition in that way?

1:43:07

Yeah, thanks.

1:43:10

Got a follow up.

1:43:10

Including the hall water, I mean conditioning.

1:43:14

Then what I've said is these are either or is that is that clear?

1:43:18

So option 1, drill 4 test wells, one test well on each of the new parcels.

1:43:25

Monitor those wells for the appropriate amount of amount of time, whether it's 24 hours, 72 hours, let the hydrologist figure it out, test to see how productive they are.

1:43:34

Simultaneously, moderate monitor the neighbors adjacent wells to see if there's an impact for the appropriate amount of time.

1:43:42

If all that proves out, yes, the wells are productive enough, there isn't an impact on the neighbors, then we get to go forward or second option, scrap all that.

1:43:52

Just go with cisterns and hauling water.

1:43:54

No wells.

1:43:55

Those would be the what my desire would be the two conditions of a yes, but the cisterns.

1:44:00

I mean is my understanding from Charlie was no, no, I'm sorry, this is cisterns entirely for hauling water.

1:44:07

No wells not but the no holes in the ground.

1:44:10

There's like two different types of cisterns.

1:44:11

This is just a cistern.

1:44:13

No wells.

1:44:14

You got to hire a truck and fill the cistern, got it.

1:44:16

That kind of cistern.

1:44:17

So we got those are the two.

1:44:19

Those would be two options of yes.

1:44:21

And I don't see a legal impediment, but I'm not the expert on wells, sanitation, things like that.

1:44:32

But could you craft a condition that has to be satisfied prior to final plat approval?

1:44:42

Yes, great, thank.

1:44:43

Thank you.

1:44:43

Thank you.

1:44:45

I've got a follow up.

1:44:46

So this might be an option, a variation on the first option that that you suggested, Josh.

1:44:55

So and here in a second, I, I would love to pose this question to the applicant or applicants representative.

1:45:02

But John, from a, from a process standpoint, it seems like if, if what we are looking for, if the position that we have is that adequate evidence has not been presented to demonstrate an adequate quantity of water.

1:45:23

Then if what we're looking for is four additional wells drilled, since the existing well cannot be used as a proxy for for the quantity and availability of water across the site.

1:45:39

If what we're looking for is four additional wells drilled, either that occurs in this process that we're in right now before we make a decision on preliminary plat approval or that's a condition of subdivision approval such that we would, we would approve conditionally.

1:45:57

And then prior to final plat approval, those wells would need to be demonstrated both in terms of the quantum of water that those wells deliver, but also that there's no adverse impacts upon neighbors.

1:46:11

Would would that be a couple legitimate variations on that?

1:46:17

I mean the first one is, is way more speculative because I, I suspect the applicant, I did not to put words in your mouth, but you would want some preliminary approval based on that condition being fulfilled versus speculatively going out tomorrow and and drilling a bunch of wells before we take action Preliminarily, does that make sense?

1:46:50

I think John said we could do it either way.

1:46:53

Yes.

1:46:53

One thing to consider with conditioning this prior to final plat approval is we be doing analysis on potential subdivision impacts and once they have preliminary plat approval, that's kind of outside of the realm of the public's opportunity to participate in that analysis.

1:47:11

So there may be a need for that condition if that's the route we go to kind of bake in an additional notice and public hearing to give neighbors an opportunity to comment on, on the findings of that report and that can be done.

1:47:27

That's a.

1:47:28

I'm going to lean on John for that, if that's a possibility.

1:47:31

Well, that could be done.

1:47:33

And, and I mean that that's a salient observation.

1:47:36

However, I, I would like to think that we could craft conditions that were sufficient, sufficiently objective that you either qualify or you don't.

1:47:50

And if you know, and so you either do A or B such that it isn't necessarily something that, that you can argue about.

1:48:02

You either have 10 gallons per minute or you know, the, the various, the various quantities that that Charlie talked about, or you don't.

1:48:11

And if you don't, then you do B.

1:48:14

But it may not be possible to do that.

1:48:17

In which case then you know, I, I don't know, I haven't crafted these conditions yet.

1:48:24

I'm just, I'm just saying that I think we could do it, but in the event that we can't, then we might need to also figure out a way to have a subsequent hearing prior to final what, what would what would make it so we couldn't do it?

1:48:43

OK.

1:48:43

So how process wise, John, Well, how, what would you recommend, I'm not asking you to be hydrogeologist, that's all right.

1:48:51

So what would you recommend for process and how we get to the specifics?

1:48:55

What is the right duration of time for these test wells to be drilled and monitored?

1:49:00

What is the right duration of time and type of monitoring for adjacent wells to determine if there's a right impact?

1:49:08

I'm not asking you to answer those questions.

1:49:10

I'm saying how do we get to answers to those questions so that we can accurately craft conditions of approval?

1:49:20

Well, we get we get the expertise within Missoula County and the development community together in the applicant and try to figure out something that people can agree on.

1:49:32

OK, So in that case, and I'm just speaking hypothetically and it kind of so I should have asked.

1:49:36

I apologize.

1:49:37

Could we ask Elena to meet with Mr.

1:49:41

Yellen and the the good folks who own the property and and Mr.

1:49:45

Ewart, who all who wanted to be an end you to Sir.

1:49:48

And the blue shirt.

1:49:49

I forgot your name.

1:49:50

You all could get together and come up with what the right numbers are.

1:49:53

And we don't go forward until we have consensus.

1:49:56

Yeah.

1:49:57

I mean, somebody from planning development system.

1:50:00

Thank you, John Patrick.

1:50:01

Of course, I'm doing this riffing on the fly here.

1:50:03

I mean no disrespect by forgetting anyone.

1:50:06

So of course, Patrick could be involved too.

1:50:09

And then when you all come up with consensus, that means everybody agrees doesn't work.

1:50:12

If Mr.

1:50:13

Yellen likes it and Elaina doesn't or vice versa, you all got to agree.

1:50:16

Then we go forward on these test wells and monitoring the adjacent wells.

1:50:21

And if the right metrics are, are reached, then we move forward or we don't do it at all unless you want to go with haul your water and fill your cistern with no hole in the ground.

1:50:31

I, I actually think we'd want that in place before final plat approval, if I think we'd want it as a condition of approval.

1:50:39

But before we get too far down the path here, I guess I, I would like to ask a question of either the applicant or applicants representative.

1:50:46

And you don't need to answer it today if you need time to, to think it over.

1:50:50

But would you, would you contemplate including a condition of approval that as I just said, as as, as Josh just said, a condition of approval related to having wells in place monitored appropriately for output and also monitoring adjoining wells of some of the neighbors such that they are not adversely impacted or you have a sister in any hall water.

1:51:21

And you don't have to decide right now.

1:51:22

You don't, you don't, I mean, you could talk about it.

1:51:25

This is a lot to decide on the fly.

1:51:26

So feel please, please don't feel pressure.

1:51:28

You have to do it right now.

1:51:29

And I think what you're seeing is we, we are as usual at trying to get to yes, but but we have serious and significant concerns.

1:51:39

And if you need to think it over, that's no problem.

1:51:42

That's OK.

1:51:45

OK, wait, wait.

1:51:47

Let's see what John has to say.

1:51:49

I'm gonna talk about something a little different while there's a discussion.

1:51:53

Please go discuss.

1:51:54

I mean, obviously, we're headed to another public hearing.

1:51:57

And I think that that's correct because my interpretation of what Elena offered to us today is what we would call new information under the Subdivision and Platting Act.

1:52:11

It's information that wasn't available to the public prior to this hearing.

1:52:15

It wasn't available to the applicant.

1:52:17

It wasn't available to the applicant's representative or consultants.

1:52:20

It's information that everybody should have an opportunity to digest.

1:52:28

And so in, in any event, we're going to have another public hearing.

1:52:33

And under the law, we can set that public hearing out as far as 45 days.

1:52:38

We, I, I know the applicant, you know, wants to get to the decision as, as soon as reasonably possible.

1:52:45

We have plenty of time to talk, discuss these things, identify the, the pitfalls that we can't foresee sitting here today at this late hour and hot afternoon.

1:53:00

Can I do a question?

1:53:01

So I guess this would be for for Mr.

1:53:04

Ewart or Mr.

1:53:05

Yellen, whoever wants to answer this, I can ask the question.

1:53:08

You guys get to decide.

1:53:09

How much time would you like to do 2 things.

1:53:11

One, make a plan amongst yourselves and confer with Elena and and reach some kind of a conclusion.

1:53:18

If that's the choice you want to go down, how much time would you like?

1:53:27

I guess my question Lee, Lee come up to the microphone and and, and the question would be how much time would you like?

1:53:33

OK.

1:53:34

So on time frame, it would be dependent on if we're looking at preliminary plat approval with a condition of four wells and monitoring wells or what we're going to do versus doing just one aquifer test and monitoring several.

1:53:58

It's the former, it's the former.

1:54:00

So if it's four wells and I have to discuss that with them if they're willing to do it because that would add to the to the lot prices and based on a well because we turn that into the production well, obviously for sure.

1:54:15

I mean, you just added value, but I don't think I'd need more than a week to meet with Elena to figure out parameters of the aquifer test.

1:54:26

How does that work for you, Elena?

1:54:29

You get to say too, how much time do you need?

1:54:30

And, and come come up to the microphone.

1:54:33

Elena, Sorry.

1:54:34

But we'd still have to drill the wells, of course.

1:54:36

I don't think we would need more in a week to OK.

1:54:41

Elena also has a work plan and may need more time, but, but if I'm not mistaken that the well drilling comes after the preliminary platypus.

1:54:50

So, so we're not just asking how much time to do all of that, just talking about getting you guys on the same page.

1:54:56

I, I mean, I, I would hope that we could come to a conclusion and consensus that quickly, but I think it might be prudent to provide a little more time.

1:55:06

What would you like 2 weeks?

1:55:07

OK.

1:55:08

And I would also, I think Kyle has other comments that he might like to include in this discussion too.

1:55:15

OK, thanks, Kyle.

1:55:17

Oh, and Patrick and Patrick, But yeah, if I could also add to the timeline conversation after Kyle.

1:55:23

OK, Kyle Kapster and and just listening to those two, the A or B scenario, and this may not be important for your discussion, but that would that wouldn't necessarily align with sanitation reviews.

1:55:36

So there's kind of a three, three things that we do with sanitation.

1:55:39

You can either solely rely on a well, just is what we're kind of discussing.

1:55:44

You could haul water and and not have a a well at all.

1:55:47

The third option would be that if you don't meet those minimum requirements within the sanitation law that you have a supplemental well or a supplemental cistern.

1:55:56

Apologies.

1:55:57

So that cistern.

1:55:58

So let's say instead of having 10 gallons per minute, you had 7 or 8 or even 9.

1:56:04

Then you would require a cistern.

1:56:06

Assuming that you can meet the minimum requirements to be able to use a cistern.

1:56:10

Again, three times the daily, average daily flow and plus irrigation.

1:56:15

So I guess, I guess what I would be what I'm just trying to bring into the light here is that you'd be missing that middle piece as an option, which is in sanitation review, which may not have anything to do with your decision.

1:56:25

But let's let's let's include that middle piece.

1:56:28

And that's why you guys who are actual scientists on this would figure it out the details.

1:56:31

Thank you, Tim or Pat.

1:56:35

Yeah, Tim and then Patrick, I just wanted to add 1 quick caution.

1:56:42

I know there are folks that from the outside that have volunteer participation in some sort of measurement drawdown, whatever neighbors like Miss Evison, we want to make sure we don't make a condition that can't be met.

1:56:56

So if there aren't outside participants, it could be problematic.

1:57:00

I just want you all to know that.

1:57:02

I mean, somebody could tap out and say, well, I said at the meeting that I was going to participate, but I don't want to participate.

1:57:08

So that's just a caution as we move forward in crafting this condition.

1:57:12

Thank you, Patrick.

1:57:15

And then just adding to the process and timeline, it may take a couple of weeks to come up with agreed upon conditions, but then from our office's perspective, we also need to post those on Missoula County Voice and give the public time to interact and comment.

1:57:28

So it may be more than a couple weeks that we would need before hosting another public hearing.

1:57:33

Given all you've heard, Patrick, what would your recommendation be on when we should do this next?

1:57:38

I think at the earliest, looking at the last week in June, I believe it's June 26th.

1:57:44

Is that Thursday meeting great that we have on, I would say would be the 29th pardon May?

1:57:50

Nope.

1:57:50

I'm looking at May, June 20 or June 26th and what would be accomplished prior to that meeting.

1:57:59

So I from my understanding it would be that the involved parties would get together Elena Evanson with water quality District, the applicants and our office planning, development and sustainability to come up with some agreed upon conditions of approval as it pertains to drilling the proposed wells and and determining that demonstrating sufficient water quantity.

1:58:24

The wells wouldn't have to be drilled.

1:58:25

Just you guys determine what all the metrics are and make a plan determining how to craft a condition for that requirement, correct?

1:58:33

Great Lee.

1:58:38

So it is what you're saying.

1:58:40

You want to hold another hearing and wait for preliminary approval until the conditions are drafted and then we have another hearing.

1:58:53

Is that what I understood you to say?

1:58:55

Yes, if we're going to be crafting additional conditions of approval after this public hearing, I, I believe the public has to have the opportunity to comment on the those proposed conditions.

1:59:05

So we're going to have another 30 day delay.

1:59:09

This isn't a delay.

1:59:10

This is time you have to craft conditions that work for you and, and your client.

1:59:14

OK, OK.

1:59:15

But maybe Lee, maybe I'm OK.

1:59:17

On the 26th, a plan will be presented to us of conditions of approval that we can vote on and say yes or no.

1:59:27

So that yes, it would be a presentation basically of a supplement to the original staff report to address the concerns of groundwater availability.

1:59:36

And we would hope that all the interested parties would have met, reached consensus on what those conditions would be, at which point you guys would have done all the heavy lifting and we just move it along.

1:59:48

Yeah, I think basically we don't have the conditions of approval today.

1:59:52

So.

1:59:53

So until we have these new conditions to tack on to the existing conditions of approval, we are not able to vote yes or no.

2:00:03

Oh, I'm just trying to understand the process, that's all.

2:00:06

I'm.

2:00:06

I'm asking questions.

2:00:07

I'm not arguing or anything.

2:00:09

I'm just trying to understand what the next meeting is and what it's for, what makes sense.

2:00:14

It is after he just spoke.

2:00:16

OK, thank you.

2:00:19

Thank you.

2:00:19

Then the work will begin if if approved on then they go forth and drill the wells and do all the stuff and OK done.

2:00:31

Did you were you going to say something?

2:00:34

Do we do we formally move to do this again on the 26th?

2:00:37

How do we do that?

2:00:38

You could continue the public hearing until June 26th and in the interim county staff and the applicant and their staff has the opportunity to try to come to an agreement on appropriate conditions of approval.

2:00:57

Those need to be finalized, if at all, well before the 26th so that we can put those on Missoula County Voice, let the public know, let the public digest those and give them an opportunity to comment on those at the meeting on the 26th.

2:01:17

What would the what's well before me.

2:01:20

Yeah, I guess.

2:01:21

I guess first I want to find out if any of this is even agreeable to the Sparks or the applicants representative.

2:01:27

I mean, if it's not, you'll get an up or down vote today.

2:01:32

But the path forward for a yes would be the end of June.

2:01:44

Yeah.

2:01:45

I'm sitting back there nodding my head.

2:01:47

I understand where you guys are coming from.

2:01:49

We do have to consult a few people, of course.

2:01:53

So the time frame, I've heard anything from two weeks to the end of no ad sorry.

2:01:58

So we're gonna have a meeting on the 26th for sure.

2:02:01

And Patrick, what's the timeline?

2:02:03

We need to have the information or ahead of time so we can get it out on Missoula County, boys, the sooner the better.

2:02:10

I would say at least a week on Missoula County Voice would be OK.

2:02:13

So then that would be the 19th.

2:02:15

So what we would be looking for from all the interested parties is that you guys would get together and come to consensus on what these conditions of approval are by the 19th of June.

2:02:24

Then we could post them and then we'd meet back here on the 26th where we do a vote.

2:02:29

Yeah, 19th is fine.

2:02:30

Great.

2:02:31

And then we're going to leave it up to you, all of you interested parties to schedule your own time get together as much as you need to hammer this out by the 19th.

2:02:40

Yeah.

2:02:40

Understood.

2:02:41

Thanks.

2:02:42

And Elena and Charlie, and does that work for your guys's shop?

2:02:48

They better say yes.

2:02:50

I think that's a yes.

2:02:52

That's going to be a yes.

2:02:53

We will answer for you.

2:02:54

OK.

2:02:57

Thank you all.

2:02:58

Are we?

2:02:59

Are we anything else on this?

2:03:02

Everybody clear or anybody not clear?

2:03:05

There we go.

2:03:05

That's more appropriate question.

2:03:10

Could I get everybody's contact info and e-mail?

2:03:13

Of course.

2:03:14

You guys go work about yourself.

2:03:16

Go do that.

2:03:16

Yeah.

2:03:17

OK.

2:03:17

Thank you.

2:03:18

Thank you.

2:03:18

Lee, we adjourned.

2:03:20

Is there any other business?

2:03:23

OK, we're adjourned.

2:03:24

Thank you all for your patience.