

## Grand County Planning Commission Minutes

August 26, 2009

A regular meeting of the Grand County Planning Commission convened on the above date at 6:00 PM in the Grand County Courthouse, Council Chambers.

**Members Present:** Chair Jean Binyon, Ed Bridges, Mike Duncan, Dave Cozzens, and Kalen Jones. D.L. Taylor and Dave Stolfa were absent.  
Council liaison – Gene Ciarus.

**Others Present:** County staff Krissie Killoy, Mary Hofhine, and Mark Wright and other concerned citizens.

The Chair called the meeting to order at 6:00 PM and requested that all cell phones be turned off and introduced the members of the Commission and staff.

The Chair asked the Commission if there were any conflicts of interest or ex parte communication that needed to be disclosed in regards to the agenda; there were none

The Chair explained the process for the public hearings; staff will give their presentation, applicants will get 30 minutes to make a presentation since there are experts in the field of hydrology and the presentations may take some time. The public will have 3 minutes to speak on the subject.

### **Public Hearing – Cougar Canyon Preliminary Plat –**

Staff read into the record the General Plan as amended to date, the Land Use Code as amended to date and staff report and all the supporting material.

This application is submitted by Floyd Harrell. The applicant is requesting preliminary plat approval for six, 10-acre recreational subdivision lots. The portion of the property intended for subdivision includes approximately 77 acres located off of Sand Flats Road in the Range and Grazing zoning district. Surrounding properties are also zoned RG and consist of private land to the west and National Forest Service Land to the north, south, and east.

The Recreational Subdivision allows for greater design flexibility where there is a reasonable expectation that resulting lots will have limited, seasonal access. Where appropriate, however, and at the discretion of Planning Commission, Recreation subdivisions should conform to the subdivision standards of Article 7.

The land use code provides somewhat reduced standards for Recreational Subdivisions. The specific standards were provided in your staff reports and include such things as limited, seasonal access, lack of public services and facilities, allowance for cisterns and septic systems, and conformance to Wildfire standards.

Access for lots 1-4 will be from Sand Flats County Road and include a road dedication to the County as part of the Final Plat requirements. Staff has noted that Additional road right-of-way may be required along the 90 degree turn on the north western property line.

One lot - lot six- is accessed from a private access tract greater than 1,000 feet. Article 7 includes restrictions regarding cul-de-sac lengths, however, design flexibility is within Planning Commission' discretion for a recreational subdivision. & that the applicant has addressed emergency access concerns for this lot with an emergency turnaround.

The applicant proposes to utilize both well and hauled water and septic systems. Percolation tests have been performed on all lots and have received preliminary approval from the southeastern district health department.

Physical Constraints include the existence of steep slope areas as well as project location within a wildfire hazard area.

Mitigation requirements to be adopted for each dwelling unit, and recorded with the final plat, include:

1. Class A or B roofing coverings;
2. fire resistant siding material;
3. spark arresters on all chimneys and flues;
4. fire extinguishers and equipment;
5. Maintaining a 45 foot defensible zone; and
6. Provision of a water storage tank of 1,000 gallons or greater with an accessible spigot for an emergency water source for wildland fire protection purposes.

The County Engineer has reviewed and approved the Final Drainage Plan. Construction plans, cost estimate, and warranty bond may be required per County Engineer's recommendations at Final Plat.

The applicant, Floyd Harrell and the applicant's agent, Tim Keogh, stated that the staff had made a through report and only wanted to add that some flexibility in the design of the drive would be appropriate. The drive is essentially a long drive way and they will provide appropriate turnarounds for the fire department.

The Chair opened the public hearing – with no comment from the general public the public hearing was closed. The Chair entertained a motion.

Kalen Jones moved to forward a favorable recommendation to the Council subject to the following conditions:

1. Update of the Final Plat to include compliance with the County Engineer's recommendations regarding additional dedication to the County for Sand Flats Road.
2. All utilities must be installed underground.
3. Final review and approval of the CC&Rs by the County Attorney.
4. Inclusion of plat notes indicating:
  - (a) seasonal lots with limited facilities and services,
  - (b) facilities and services unlikely to be extended in the near future, and
  - (c) road maintenance to remain the responsibility of the HOA.
5. Inclusion of plat notes indicating each dwelling unit shall be constructed to include:
  - a) Utilize Class A or B roofing coverings;
  - b) Utilize fire resistant siding material;
  - c) Install spark arresters on all chimneys and flues;
  - d) Provide fire extinguishers and equipment;
  - e) Maintain a defensible zone (fuel break) of at least 45 feet around each residential structure;  
and
  - f) Provide a water storage tank of 1,000 gallons or greater with an accessible spigot for an emergency water source for wildland fire protection purposes.
6. No building permits will be issued until the Southeastern Utah District Health Department provides final septic design approval;
7. Private Access Tract cost estimate and warranty bond requirements to be determined by the County Engineer.

Mike Duncan seconded.

The Chair asked the Commission if there were questions on the motion.

Kalen Jones asked for clarification from staff on the Wildland Urban Interface requirements. Staff explained the plat notes will address the needs of the Wildland Urban Interface including building codes.

Ed Bridges asked to amend the motion to allow the additional length of the drive and to provide a turnaround to the Fire Warden's approval.

The Chair asked Kalen Jones if wanted to include the amendment, Mr. Jones agreed, Mr. Duncan seconded. The Chair reread the motion to include:

8. The Planning Commission approved the cul-de-sac length on lot six subject to a provision for a turnaround at the end of the drive.

All voted in favor of the motion.

**Public Hearing – Westwater Farms, L.L.C., Conditional Use Application for a commercial produced water recycling facility to include an uploading station/tank batter, water processing plant, secondary containment pits and injection wells.**

Staff read into the record the General Plan as amended to date the Land Use Code as amended to date along with the staff report and related materials.

The application is submitted by Tom Warnes on behalf of the property owner Westwater Farms LLC and is requesting site plan and conditional use permit approval for a production water injection well and production water recycling facility. The proposed facility is located in northeastern Grand County approximately 5.5 miles from the Colorado state line northeast of Interstate-70 and exit 227. The project site is approximately 90 acres in size in the Range and Grazing (RG) zoning district.

The applicant proposes to accept exploration and production water from oil and gas wells. The water will be trucked to the facility and offloaded into a holding tank. Hydrocarbons will be removed from the water and pumped into adjacent tanks. Production water will be treated for on-site irrigation use or off-site resale, and/or disposed of in one of two proposed injection wells. Production water planned for on-site irrigation and/or off-site resale will go through a series of treatment systems prior to use.

The applicant needs to provide a transportation plan showing anticipated traffic volume or routes and a road agreement approved by the County Road supervisor.

A monitoring plan needs to be submitted that will;

- a) ensure receiving water meets established standards, and
- b) ensuring that treated water meets established standards for on-site irrigation, off-site resale, and injection.

The applicant still needs to provide referral agency letters from the Division of Oil, Gas, and Mining, Division of Air Quality, and Division of Drinking Water.

A monitoring fee will need to be established based on the County fee schedule.

County Engineer comments:

- The slopes shown on the 10k condensate may not be stable. Provide a geotechnical engineering analysis.
- Provide calculations that demonstrate the required storage is supplied by the condensate tank containment berm.
- How is the manifold connection from the 200k tank prevented from overflowing the 50k condensate storage available?
- There needs to be a positive prevention from overflowing the receiving tank.
- Provide foundation design and calculations for condensate tanks at building permit.
- UDOGM concurrence for leak detection approval is necessary.

- Plant decommissioning costs not reasonable. A reclamation bond and plan seem to be underestimated and costs should include removal of remaining waste, removal of structures, management of contaminated materials, re-grading and re-vegetation.

The Conditional Use Criteria have been reviewed by staff finds the following:

Conditional Use Permits shall be approved where the County determines that there will not be a significant negative impact upon residents of surrounding property or upon the public. The following criteria shall be considered in the application review:

**Effect on Environment**

*The location, size, design and operation characteristics of the proposed use shall not be detrimental to the health, welfare, and safety of the surrounding neighborhood or its occupants, nor be substantially or permanently injurious to neighboring property, nor cause substantial or permanent interference with the right to peaceful enjoyment of property.*

Staff Finding = The site is located more than a mile from any residence, residential zone district, or national park. The site is not visible from a scenic byway. This area was recently identified as appropriate for a different type of production water facility due to the limited impact on surrounding property owners and proximity to the I-70 corridor. The main concern for this facility is siting and the potential impact on ground water. These concerns are addressed in the attached report by an independent geologist (Dr. Wayne Downs, Downs Engineering, consultant to Horrocks Engineering).

**Compatible with Surrounding Area**

*The proposed site plan, circulation plan and schematic architectural designs shall be complementary with the character of the surrounding area with relationship to scale, height, landscaping and screening, building coverage, and density.*

Staff Finding = The proposed use and site plan are compatible with the surrounding area. Additional information, specifically non I-70 routes and anticipated traffic volumes, is needed.

**External Impacts Minimized**

*The proposed use shall not have negative impacts on existing uses in the area and in the county through the creation of noise, glare, fumes and odors, dust, smoke, vibration, fire hazard, excessive light, or other injurious or noxious impact. The applicant shall provide adequate mitigation responses to these impacts.*

Staff Finding= The proposed use is not anticipated to have negative impacts on existing uses in the area.

**Infrastructure Impacts Minimized**

*The proposed use shall not have negative impacts on existing uses in the area and in the county through impacts on public infrastructure such as roads, parking facilities and water and sewer systems, and on public services such as police and fire protection and solid waste collection, and the ability of existing infrastructure and services to provide services adequately.*

Staff Finding= The proposal has addressed public service and infrastructure impacts through a Road Agreement with the Road Department (not yet finalized) and an emergency services agreement with the Fire Department. Additionally, the applicant has received water and septic system approval from the State Sanitarian as well as agreed to routine site inspections and a monitoring fee.

**Consistent with LUC and General Plan**

*The proposed use will be consistent with the purposes of this LUC, the General Plan, and any other statutes, ordinances or policies that may be applicable, and will support rather than interfere with the uses otherwise permitted in the zone in which it is located.*

Staff Finding= Development standards and use-specific criteria have not been adopted for this specific use; however, the applicant has submitted information in a format similar to an existing production water facility. The proposed use and location are consistent with uses otherwise permitted in the RG zone district.

**Parcel Size**

*The proposed use may be required to have additional land area, in excess of the lot area otherwise allowed by the underlying zoning district, as necessary to ensure adequate mitigation of impacts on surrounding land uses and the zoning district.*

Staff Finding = No additional land area is necessary.

Mark Wright, County Engineer introduced Dr. Wayne Downs, a professional geologist/hydrologist contracted through the Horrocks, the county's contract engineer. The cost of using Dr. Downs as an expert will be charged back to the applicant.

Dr. Downs gave a brief introduction of his knowledge of the community including that he had worked on the Glen Canyon Aquifer water plan for Spanish Valley and Moab. The presentation will illustrate the Harley Dome area and how it will affect the Moab water aquifer system. Gave a brief presentation on the water quality in the Moab area, Moab has pristine drinking water. Also the geology of the proposed injection wells at Harley Dome to see if there is connection to the two. The presentation is based on the report provided to the County. (attached)

Questioned asked by the Commission to Dr. Downs during the presentation are as follows:

The presentation included a comment by Dr. Downs regarding (page 9 in the report) the "domes" have a thick Morrison formation about 350 to 400 feet thick, which is not permeable to the movement of water and is very dense material and will not transmit water very well. Underneath is the Sommerville formation which is more of the same. Two upper zones provide a cap of the permeable water underneath that the Westwater plant wants to take advantage of the cap, which will keep the water from migrating up.

Mike Duncan asked if a fracture in the formation could release the injection water into the deeper formations the Morrison on top and the Chinle on the bottom. Dr Downs replied that the Morrison formation doesn't fracture the caps are more plastic (like harden clay) it reflects and can recover more easily. The Harley Dome area is three to four miles west of Colorado border about 60 miles to the Spanish Valley. The geology slopes away from the LaSal Mountains towards the Uinta basin. It is discontinuous across the formation for water to flow into the Glen Canyon Aquifer.

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Kalen Jones asked about the impacts on the Entrada aquifer – Dr. Downs stated that the data from the Entrada sandstone formation show salinity of less than 10 TDS, which is better quality than what will be injected and the state may have issues with that.

Mike Duncan asked if the pressure from the injection could cause the water to get to the Colorado River? Dr. Downs explained that it slopes to the north and west if they put a lot of water in, backed it up, and pressurized it – it might go up you might get water to flow uphill for a little ways, the Colorado is about 5 miles away, it would be stretching it to expect that to happen.

Are there wells in Thompson and Cisco that would be infected by the injections? Dr. Downs stated he didn't look at the wells in Thompson or Cisco. The zone of influence, but there is enough porosity to inject 10,000 barrels a day for years if you could fill all that porosity. That may sound like a lot for injection or withdraw, but 10,000 gallons per day converts to 292 gallons per minute – Moab City wells 4,5,7,10 withdraw 425 gallons per minute each and well 6 withdraws about 650 gallons per minute. Just to give examples.

If injected into the fractures the water could move further rather than the porosity and soil about a mile or two in years.

The Chair asked to hold the questions until the next presentation and called Tom Warnes for his presentation.

Mr. Warnes introduced the geologist they hired, Dave Allin and asked that he present their findings. 49 min

David Allin presented ~~the~~ that there are no water source wells in the Entrada in the Cisco or Thompson area, the water quality would require significant cleaning to remove the TDS. There have been wells drilled in the Westwater farm area and it was found to be "salty".

There should be no fracturing or artificially fracturing the rock, there should be enough porosity and natural permeability in the sandy soil to introduce water into the ground at rates that will be effective. Injection wells do not have the high pressure pumps that are on site at the oil fields that induce fractures. Injection wells are operated under a different standard. They allow fluids to enter into the rocks at the rate of natural acceptance. There is a test required for the permit, once the pressure and rate are determined on the well test that will determine the injection pressure which then cannot exceed ~~that pressure~~ and a regulator is installed. The pressure is not at a rate that would fracture rock.

Mr. Allin asked if there were any questions that he could answer.

Ed Bridges asked if the distance from Thompson and Crescent would be a consideration. Mr. Allin explained that there's a geological separation from the Thompson spring and the injection wells at Westwater this separation is about 500 feet. Thompson springs is about 500 feet higher than the area where the injection well will be at Westwater.

Mike Duncan asked if the adjacent County (Uinta) will experience increased salinity in their wells? Mr. Allin explained that they are in the area of influence which is one of the steps for getting an underground injection control permit. The calculation is based on the porosity of the rock and was calculated to show that if 8,000 barrels for 30 years it would reach out to about 128 acres around the injection wells, the capacity of the rock is so large it would migrate a mile or 2 in 100 years. This calculation was for two injection wells. This is a good candidate due to the fact that is full of brine water to begin with.

Mr. Allin explained that the migration of water is a lengthy process, an example is recharge for the Glen Canyon aquifer is about 100 years after the snow hits the LaSal Mountains.

The Chair stated that the injection wells are only a part of the proposal and asked out of all the water received how much will be injected?

Mr. Allin stated that would be a question for the applicants. Mr. Warnes said that about 80% will be used for irrigation once cleaned up the rest will be injected. Mr. Warnes asked that the people that will be setting up their purification plant make a presentation on their product.

Travis John and Theron John, father and son gave a presentation on the water treatment product that they created. The company is called Planet Wide Clean Water Inc. and the system is a chemical free technology (electric coagulation) system. Explained the systems they have installed and how they work; they have installed these worldwide. The system allows the water to be used for irrigation or augment rivers and streams.

Mr. Warnes gave a presentation on the process that will be used at Westwater. They plan on processing the water and using at least 80 percent of the water for irrigation purposes. There will be no ponds and no VOCs.

The Chair asked if there were comments from the audience.

Mr. Chris McEnanny, attorney for the applicant, expressed concerns that the County has any authority over the injection wells. Mr. McEnanny believes that UDOGM and Federal regulation does and should have exclusive jurisdiction over regulating the injection wells and the County shouldn't impose additional regulation. Mr. McEnanny provided the exemption regulation stated in the State and Federal Codes.

The Chair closed the public hearing with no other comments, Ms. Binyon stated that the public hearing is for information only and will need to check with the County Attorney regarding the State and Federal regulations jurisdiction over the waste water practices.

The Chair called for the motion.

Ed Bridges moved to table the application and continue the public hearing subject to the following information to be provided to staff for review and compliance.

1. UDOGM Permits.
  - (a) permit to receive and treat exploration and production water, and
  - (b) Underground Injection Control (UIC) Permit.

2. **Transportation Plan.**  
(a) submission of a transportation plan estimating traffic volumes and routes, and  
(b) final approval of the Road Agreement by the Road Department Supervisor.
3. **Acceptance Standards.** Submission of a monitoring plan for ensuring receiving water meets established standards.
4. **Daily Water Treatment Schedule.** Submission of water quality standards for all proposed uses: (a) on-site irrigation,  
(b) off-site resale, and  
(c) injection.
5. **Precipitate Disposal Plan.** Submission of a disposal plan for post-treatment bi-products.
6. **Monitoring Plan.** Submission of a monitoring plan, including collection points, for:  
(a) on-site irrigation  
(b) off-site resale, and  
(c) injection.
7. **Reclamation Costs.** Submission of an updated cost estimate for facility decommissioning and land reclamation to be approved by the County Engineer.
8. **Containment Berm Calculations.** Provide calculations demonstrating that the required storage is provided by the proposed containment berm.

Mike Duncan seconded and all voted in favor.

**Approval of Minutes** - The Commission accepted the July 8 and August 12, minutes as corrected.

**Community Development Updates** – The amendments to the Construction Standards are being reviewed by the appropriate agencies.

**County Council Update** – Gene Ciarus explained that the rezone of the Cisco area to industrial zoning was denied by the Council. The BLM owned land near the airport has been transferred to the County for the shooting range. Gene gave a brief update of the new administrator's position.

With no other items on the Agenda the Vice Chair called for adjournment.

**Adjournment:** The meeting was adjourned at 8:30 P.M.