## **Ouestions for Candidates at the Teton County and Town of Jackson Water Resources Candidate Forum.**

\* Of these questions, six will be asked during the forum

The Bureau of Land Management 2004 record of decision (ROD) has set the expectation of disposing 16 parcels of federal public land to the portfolio of Teton County, WY. Based upon the ROD and the Snake River Management Ownership/Transfer Plan, the land should be retained for recreation, public access, open space and wildlife habitat.

BLM Parcel 9/10 (320 acres, ~1.5 mi of river frontage) is located north of Emily Steven's Pond and Hwy 22. What is your vision for future public uses at this parcel? How much, if any development should occur on this site?

The most important first step is to identify the ecological value of the parcels, and make sure the areas of critical ecological value are protected. Once they are, any decisions about future public use and/or development should be made after actively consulting with the public about their wishes. Steps need to be taken, however, to ensure that none of those uses compromise the ecological health or integrity of the parcels.

2) Last week was the 50th anniversary of the passage of the Wild & Scenic Rivers Act. Next year will be the 10th anniversary of the Snake River Headwater designation as a Wild & Scenic River (over 400 river miles in Teton County, WY). The Wild & Scenic Rivers Act provides for a free-flowing river, water quality protection and maintaining Outstandingly Remarkable Values (Recreation, fisheries, wildlife, Scenic, values).

Teton County Is facing its first documented case of unpermitted river bank stabilization within the Wild & Scenic corridor. What role does local government play in supporting the intent, process and standards of the Wild and Scenic Rivers Act?

Both literally and metaphorically, the Snake River forms the heart of the Jackson Hole valley. My understanding is that the regulatory framework for the Wild & Scenic Rivers Act does not give local government much say in the act's workings, a reality especially true for the Town of Jackson.

What the Town can do, however, is use its bully pulpit to advocate for not just the health of the Snake, but for the health of the region's entire riparian ecosystem. To me, this is a logical extension of the Comp Plan's vision statement.

cutthroat trout are native to the Upper Snake River in Teton County, WY – essentially, Jackson Hole's very own native trout – and how the Upper Snake watershed is unique for having robust native fish populations.

What legacy would you like to leave to future generations with respect to native trout and their coldwater habitat in Jackson Hole?

As a community, we spent many years and millions of dollars to define the legacy we want to leave. What did we conclude? That we want to preserve and protect the area's ecosystem. Why do we want to do this? To ensure a healthy environment, community, and economy for current and future generations.

Ensuring that future generations can also enjoy a thriving population of native trout is a direct extension of the Comp Plan's vison. And in order to do that, we must ensure that the fishery habitat continues to thrive. To do otherwise would mean we wasted all those resources in coming up with a vision statement that we don't choose to follow, much less embrace.

The fisheries section of the "Water Resources White Paper" describes how Teton County, WY, hosts some of the finest native, naturally reproducing fish populations in the United States – and outlines current and future threats to this fishery including migration barriers, habitat degradation, nonnative fish species, water quality impairments, and warming stream temperatures.

With respect to identifying and addressing migration barriers to native fish, the recently-adopted Teton County Wildlife Crossings Master Plan noted that "while this document primarily focuses on terrestrial crossings priorities and opportunities, we strongly recommend that an aquatic passage prioritization effort and County-wide policy be further explored as described in the report, as mitigation measures at aquatic crossings may prove very feasible and cost-effective to implement, and will likely be well supported by the public". It further suggests in Strategy 13 – Aquatics Crossings Prioritization and Policy: "Continue to work with aquatics-focused agency and nonprofit stakeholders on a 1) roadstream crossing prioritization to guide future replacements and 2) adoption of a County-level policy to consider fish passage (through stakeholder outreach) when making any changes to stream or river crossings associated with roads and levees".

What is your level of support for the Teton County Wildlife Crossings Master Plan's recommendations for a future aquatic passage prioritization effort and County policy to consider fish passage when updating roads and levees? As an elected official, what would you personally do to advance this effort?

Follow up: Are there any other policies, regulations, or other tools that you believe could further protect our native fisheries on private lands?

The fundamental idea informing the Comp Plan in general and its

vision in particular is that by preserving and protecting the area's ecosystem, we can continue to have a healthy environment, community, and economy. We don't have to choose – we can have all three.

The challenge – both in general and when it comes to roads and levees – is that there isn't always a clear road map to follow when it comes to simultaneously pursuing all three goals. And it sometimes costs more. But if we really want to pursue the Comp Plan's vision, we sometimes will have to proceed without a clear map to follow, relying on the north star that is the Comp Plan's vision to guide us to where we want to be.

The "Water Resources White Paper" states, "Teton County, WY, hosts some of the finest native, naturally reproducing fish populations in the United States... Yellowstone and Snake River cutthroat trout are icons of the Greater Yellowstone Region... In the Teton River drainage on the West side of the Tetons, interbreeding between native cutthroat trout and non-native rainbow trout is seriously threatening the long-term persistence of the cutthroat trout..."

The National Park Service notes, "In the recent past, fishing for cutthroat trout has supported a \$36 million annual sport fishery [in Yellowstone]." https://www.nps.gov/yell/learn/nature/Yellowstone-Cutthroat-Trout.htm

Given that recreation associated with Yellowstone and Snake River cutthroat trout provides significant cultural and economic value to the region, what do you see as the role of your desired office in ensuring the persistence and proliferation of this species here in Teton County, Wyoming?

For over 25 years, I've been researching and writing about the intersection between our environment, community, and economy. My big conclusion is that, ultimately, our community and economy can never be healthier than our environment, for if we let our environment get trashed, eventually our economy will suffer the same fate. And at that point, we'll become just like any other mountain town – quaint and pretty, but not distinctive and unique.

The Jackson Town Council can do little directly to influence the health of the region's fisheries. However, I think the Comp Plan's vision obligates the town to use its bully pulpit to advocate for the health of our ecosystem – not just in the town, and not just in the county, but as the vision statement's language states: in the area's ecosystem. Otherwise the town will be giving lie to the vision statement it adopted six years ago.

6) The "Water Resources White Paper" states that "efforts to protect [riparian habitats] have been piecemeal at best" despite the fact that riparian habitats are "more important to more species in the valley than all other habitat types combined."

Sarah Bates, Senior Fellow with University of Montana"s Center for Natural Resources and Environmental Policy, observes that "land use planning and decision-making is the responsibility of local officials, while water allocation happens through the decisions of many individuals who develop water based on their immediate and projected needs…

Despite the many disconnects between water and land use planners, there is now widespread recognition of the need to think about these resources in a more integrated way: water-conscious land use planning and community-conscious water planning."

http://lawschool.unm.edu/nrj/volumes/52/1/bates.pdf

What do you see as the role of your desired office in water-conscious land use planning and community-conscious water planning? If elected, how will you address gaps in governance like those surrounding riparian habitat protections in Teton County, Wyoming?

I gave Mosaic its title because I see the term as a metaphor. We have a lot of pieces of information about the health of our ecosystem, but what's been missing is the framework in which to place those pieces. Once inside that framework, we can then identify what we know and what we don't know, and prioritize filling the gaps. This includes not just factual knowledge, but also the connective tissue that is governmental policy.

Arguably, local government should have taken the lead in producing something like Mosaic, for after all Mosaic's focus is on the vision statement of the local governments' land use plan. But government wasn't doing it, so my Tetons 2020 group stepped in.

If elected, I will build on the framework Mosaic established to identify gaps and redundancies, prioritize them, then get to work on addressing them.

The "Water Recourses White Paper" suggests that wastewater is a primary source of contamination in Teton County, WY. Additionally, our drinking water aquifer has very limited natural protection from surface and groundwater discharge of wastewater. Yet, there is no comprehensive vision for wastewater management within Teton County, especially as it pertains to sewer and community level waste treatment infrastructure.

If elected, what stance would you take regarding the establishment of a formal agreement of roles and responsibilities between the Town of Jackson and Teton County, WY, regarding waste treatment, and would your stance be that the County should have an elevated role?

For over 125 years, people living in Jackson Hole have been lucky enough to be able to take the region's environmental health for

granted – the ecosystem has been very healthy, and there's not been much pressure on the land.

Unfortunately, in the last 20 years or so, that's started to change, and now we can no longer take the region's environmental health for granted.

Water quality and waste treatment are one symptom of this change. A generation ago, people were burying old cars and using them for septic tanks. Such solutions no longer work, as I learned when my 1% for the Tetons effort granted money to fund an experimental gray water treatment system in the critical Fish Creek aquifer area (happily the experiment worked).

I don't know what the respective roles of the Town and County should be when it comes to wastewater, nor for addressing the other looming threats to our ecosystem's health. Our residents' and visitors' health as well. The answer should be specific to each case, and be one that optimizes efficacy, cost-effectiveness, and protection of the resource. Bigger picture, we no longer have the luxury of simply taking the ecosystem's health for granted.

Wastewater from septic systems and the excessive use of landscape fertilizer are two well documented human derived sources of nutrients into our surface and ground waters. The "Water Resources White Paper" indicates that nutrient contamination (nitrogen and phosphorus) is likely contributing to nuisance levels of algae and aquatic plants, as well as contamination of drinking water in the Upper Snake River watershed. Voluntary measures, such as the Clean Water Coalition"s "Trout Friendly Lawn Program", are attempting to reduce nutrient pollution from these sources.

Knowing that these sources of nutrients are degrading our local water resources and have the potential to seriously harm water quality and aquatic habitat, do you believe that voluntary measures are enough to curb nutrient inputs into our surface and groundwater?

Follow up: Do you see regulation playing in role in reducing nutrient pollution from these sources?

Voluntary measures are always preferable, and I assume the Clean Water Coalition introduced its voluntary Trout Friendly Lawn Program believing it will work. I also assume that, through constant monitoring, within a few years the Coalition will be able to conclusively say how well the program is working. I also believe that, once the Coalition has its results, it will proceed accordingly, whether by continuing the program as is, modifying it, and/or coming to government to say "You need to regulate."

I cannot speak to whether regulation can play a role in reducing

nutrient pollution – I simply don't know. If, however, the Coalition or others ask local government to impose regulations, I will want to know what problem they think the proposed regulation will address, why they think it will work, and what the downsides of the proposal are.

9) The "Water Resources White Paper" indicates that wintertime flooding due to ice formation in Flat Creek is exacerbated due to the minimal development setback that have been required in the past, and are sometimes allowed through exemptions.

Considering the large financial costs associated with flooding issues and the large degree of time an energy put towards such problems, if data could be used to show that existing setbacks would put said development at risk due to wintertime flooding would you support increasing setback distances from water courses for future development?

The White Paper describes frazil ice formation and associated flooding as a complicated issue. It sounds as though the Flat Creek Watershed Improvement District is making progress addressing the problem, and if their efforts can solve, or at least mitigate the issue, far better to let them handle it than the town government. If, however, the problem becomes intractable and/or town action is needed, then the town should be open to re-entering the process in a more active way.

One question this issue raises for me is this: Even if it's legal to build relatively close to the creek, why would someone do that knowing their structure could be damaged by flooding in the winter? Would their insurance company even let them? Or will this setback problem basically resolve itself due to common sense and/or pressure from insurers?

If ultimately it does land in the Town's hands, then of course any decision the town government makes should be data-driven. And if the data show that the setback needs to be much greater, I'd certainly be open to that idea. But it would be a lot easier for all concerned if common sense prevailed and people chose to create a setback that would inoculate them from flood damage.

10) The Riparian Habitat section of the "Water Resources White Paper" describes the importance of areas with intact vegetation and hydrologic function adjacent to streams. Within the Town of Jackson, WY, intact riparian areas are extremely limited. Karns Meadow has been identified as the one of the most intact riparian areas left along Flat Creek.

The Town of Jackson"s purchase of Karns Meadow established a vision for this area, which includes pathways, bridges, groomed and lighted cross-country skiing, and a park facility.

Given the high importance of Karns Meadow for its natural resource values, but also, the vision by which this area was established as a Town Park, what would your vision be for the development of Karns Meadow and its recreational uses?

One of the first grants my 1% for the Tetons effort made was to help address silting and run-off issues that were degrading the riparian health of Flat Creek as it worked its way through Karns Meadow. Happily, that project worked well, and that portion of Flat Creek is now healthier than it was.

Using the Comp Plan's vision as a starting point for answering this question, our vision is to preserve and protect the area's ecosystem. The Karns Meadow stretch of Flat Creek is critical to that vision, so we must make sure that any development of the meadow does not degrade the stream's health.

That noted, while I am not an expert in this, it seems likely to me that at least some portions of the meadow can be developed in a way that allows human use without compromising the meadow's ecosystem's functions. Our community is home to many talented and innovative designers, ecologists, and experts in human behavior, and I'm confident that there is a solution that will allow for both ecological integrity and human enjoyment.

11) Flat Creek is the only stream in Teton County, WY, currently listed as "impaired" by State and Federal Management Agencies. Stream habitat alteration and stormwater runoff (runoff from streets and developed areas) have been cited as the cause of this impairment.

As an elected official, how would you value reduction of water contamination from developed areas compared with topics like additional housing density, affordability of commercial development, and staff time constraints? What types of directives would you give to your staff to address stream pollution from developed areas?

Again, my 1% for the Tetons effort put some of the first money into addressing the issues raised in this question, so I know that thoughtful planning can help repair damage done by practices that have harmed our ecosystem.

That noted, I also am a firm believer in applying the basic public health maxim of "an ounce of prevention equals a pound of cure" to any situation, including ensuring that new development will not cause harm to our riparian systems. Or other aspects of our ecosystem. How best to do this will, of course, depend on the particular circumstances of a development. But to borrow another phrase from medicine, before proceeding with any

development, we have to first ensure we are doing no harm. That's the core of the Comp Plan's vision, and we ignore it at peril not just to the health of our environment, but also to that of our community and economy.