March 31st, 2023

To: Mayor Morton Levinson and Town Council Members

Re: Comment on Karns Meadow Development



Dear Mayor Morton Levinson and Town Council Members,

I am writing to you on behalf of the Jackson Hole Conservation Alliance – we have been protecting the wildlife, wild places, and community character of Jackson Hole for over 40 years. The question before you is one of the most important questions our community faces today and will face in the coming decades: Do we provide for wildlife **needs** or for human **wants**? Of course, balancing these often-competing goals is the task set before you and all of us living close to wildlands and wildlife.

The goal of this letter is to convince you that in finding this balance in Karns Meadow, the **precautionary principle** should guide your decision making. You should go slow, be deliberate about protecting the sensitive ecology of this wetland and understand that some development actions in this meadow will have irreversible impacts. Karns Meadow is the least disturbed, most natural area remaining within the Town of Jackson. It is also the richest, low elevation wetland-riparian complex within and around the Town. I am sure you are aware of the immense ecological value of this wetland to infiltrate and bioremediate our water, of the riparian vegetation to provide critical habitat, and of the connectivity that the meadow provides for wildlife movement from Butte to Snow King. These ecological values are fragile and can easily be disrupted or harmed by the allowable uses in the Meadow. Precautions should be taken here, because once disrupted or lost, these ecological values may be gone forever.

This is our community's opportunity to live up to the #1 value in our Comprehensive Plan: "Community Value #1: Ecosystem Stewardship: As ecosystem stewards, we will ensure the health of all native species by avoiding habitat impact and fragmentation, maintaining water quality, and limiting our contribution to climate change." Karns meadow can be a model of how our community does this – There is a way for us to honor the Karns family, provide new recreation opportunities for our community, and ensure that we truly steward this incredible meadow. But to do so, we will need to use the best available science and develop as little as possible in this sensitive habitat.

The development required for human enjoyment of this meadow is minimal – it should be a quiet, slow moving, contemplative space for enjoyment of the beautiful Flat Creek meander through the meadow. The water takes its time in the meadow's many bends, and so should people in this space. Putting a transit pathway through this meadow with zooming ebikes would be contrary to what this space means to and offers our community -- a space to slow down and recharge – exactly what the hydrology does here. The intricate ecology of this wetland bioremediates and cleans our Town's water. We all know that a natural setting like this meadow will do the same for our mental health if we take time to slow down and be present.

Any development here should be designed to not impede the invaluable ecological 'work' accomplished by this wetland – any development needs to protect the critical water infiltration and bioremediation work done for free by this incredible system— to not impede the use of this space for habitat and connectivity by wildlife and should not hinder the regeneration of the riparian vegetation. And as our community and wild neighbors benefit from this meadow, let us

continue to call it a meadow, not a park. For this town, and our world, needs meadows much more than we need parks.

The Jackson Hole Conservation Alliance is not alone in desiring to see as little development as possible at Karns Meadow – Those who know and understand the meadow the best all caution against the impacts of development:

In the words of the original Natural Resource Inventory at Karns Meadow:

"The manner in which the Property is conserved will, to a degree, determine the function and health of the entire Flat Creek drainage" (Segerstrom and Dittmar, 2003).

In the words of the Comprehensive plan:

"This Preservation subarea should continue to serve as wildlife habitat and a key wildlife movement corridor in the future. Moving forward, wildlife needs will need to be carefully balanced with providing the recreational and other amenities envisioned in the original landowner's conveyance of the property" (Comp Plan IV-41, 2012).

In the words of Wyoming Game and Fish Department:

"Karns Meadow is one of the only remaining places within the Town of Jackson that provides an extensive patch of intact willow riparian habitat for wintering moose and mule deer, nesting habitat for songbirds, and foraging/ habitat for waterfowl, trumpeter swans, and osprey. Installing a pathway in Karns Meadow would decrease its habitat quality for all species due to habitat fragmentation and increased disturbance from humans and dogs... In general, we discourage pathways or trails that are designed as loops. The Flat Creek loop should be reevaluated or not pursued" (WGFD comment letter 3/23/12).

In the words of the Teton Conservation District:

"The long-term vision for Karns Meadow has been disjointed, with many different interests pushing and pulling the future of this open space toward their desired use. But in the interim, Karns Meadow has prospered without developed use, and is perhaps in the best ecological condition it has been for 100 years. Ask this simple question as you proceed with Karns Meadow Planning and development of adjacent land: Does the plan/action retain the trajectory where ecological function of Karns Meadow can continue to increase? If it doesn't, please adjust the plan so that it can" (TCD letter to Mayor and Town Council, 1/24/23).

In the words of EcoConnect in the Karns Meadow Environmental Assessment:

"The gains to our community from development may be outweighed by the impacts to wildlife habitat" (EcoConnect, 2018).

The ecological value of Karns meadow cannot be understated. Riparian corridors (like Flat Creek) are critical spaces for wildlife – they make up less than 1% of the Wyoming landscape but are used by 80% of WY wildlife species (Gerhart and Olsen, 1982). Flat Creek's riparian habitat is even more critical because it sits right in the middle of the quickly developing Town of Jackson – providing scarce habitat and critical landscape connectivity between Butte and Snow King. The robust willows, meadow shrubs, forbs and grasses all support native wildlife habitat, reproduction, and movement.

Even though the meadow is right in the middle of town and is surrounded by roads, it still provides world class habitat to our wild neighbors (mule deer, fox, beavers, badgers, rodents, goldeneyes, mallards, Canada geese, osprey, swans, cutthroat trout, bald eagles, northern harriers, red-tailed hawks, and scores of songbirds). As a bird-banding research site, Karns Meadow showed comparable songbird nest success as Blacktail Ponds, in Grand Teton National Park (Figure 1). Likewise, in a study of mule deer habitat use, Karns Meadow provided critical winter habitat and an important travel corridor to winter habitat further south (Figure 2).

Figure 1: Apparent nest success at five study sites, 2012; Karns meadow's (KARN) nest success was just slightly lower than Black-Tail Pond's (BLTP) nest success in Grand Teton National Park and was greater than three other banding sites: Kelly campus of TSS, Boyles Hill, and Rafter J (Byrd et al. 2012).

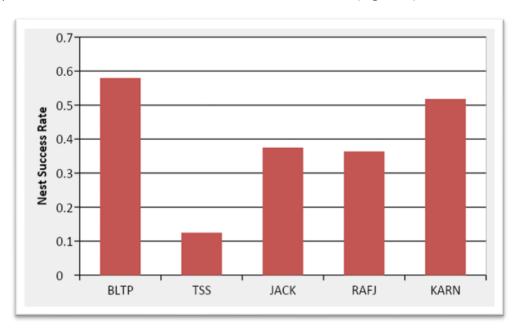
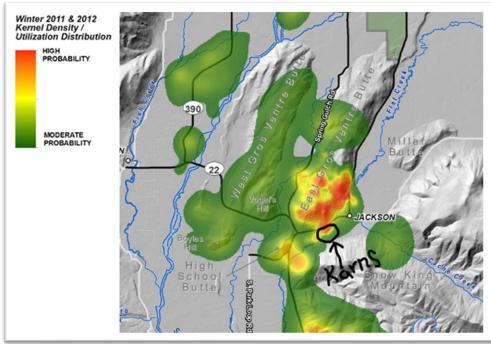


Figure 2: Winter critical habitat for mule deer adjacent to the town of Jackson (delineated from gps collared mule deer 2010-2012, Riginos et al. 2013). Black circle indicates the approximate location of Karns Meadow.



Please carefully consider each aspect of the proposed development -- below are specific comments on the four allowable uses considered at this time:

Paved Pathway – A looped, paved pathway through the meadow will have significant negative impacts on meadow hydrology, habitat, and connectivity. Development of a paved pathway in the meadow also contradicts the stated goals of the Jackson/ Teton County Comprehensive Plan to protect and steward open space. A paved 10 ft. wide pathway that encircles the meadow will add significant impervious surfaces to this wetland (more than 1 total acre), will inhibit wildlife movement and habitat use (Nickel et al. 2020), and will increase the quantity and speed of human users, which will further shrink available habitat (Lewis et al. 2021). Recent research has shown that it is the cumulative impacts of both human infrastructure as well as the presence of humans that causes the loss of habitat, as wildlife spend more time being vigilant instead of foraging and avoiding interactions with humans as well as infrastructure (Riginos et al. 2013; Corradini et al. 2021). It should be noted that WGFD discouraged the construction of a loop pathway for the very same reason in their 2012 comment letter on this project (WGFD, 2012).

Building a paved pathway on this wetland is not only ill advised ecologically but will be difficult and expensive to both build and maintain. A paved pathway would be subject to freeze-thaw, settling, cavitation by frazil ice floodwater, and other damage that could be avoided with a permeable natural surface. Also, the meadow is surrounded by pathways, so incursion into it with a new pathway would be duplicative, injurious to the meadow, and unnecessarily expensive to build and maintain.

The marginal benefit of a one-mile looped pathway certainly does not outweigh the steep ecological and financial price. Furthermore, there is little public interest in seeing Karns Meadow developed into a park. In a JHN&G poll in 2018, 78% of the respondents favored Karns Meadow having "As little as possible: Keep it natural for wildlife." Similarly, as of this writing, in the current public comment survey for Karns Meadow, 92% of the 420 respondents said that "Preserving Ecological Function and Habitat" was important or very important, compared to only 42% of respondents who said that "Recreational Amenities" are important or very important — more than twice as many constituents favor ecological conservation over recreational development.

We recommend that the proposed paved section of the pathway to the west of Flat Creek be replaced by a **natural surfaced walking path** from the parking area that **terminates in a secluded quiet area, rather than crossing the creek** behind Sagebrush Apartments. This would encourage slow and quiet recreation in this special space and eliminate the high traffic and speed of commuters using the meadow as a transit cut through on a paved pathway. The southern portion of the pathway may prove difficult and expensive to build due to the grade change and proximity to wetlands – this section of pathway would also run adjacent to existing bike lanes and sidewalk on Snow King Avenue, so it makes sense to question if the costs would outweigh the benefits.

Parking structure - The proposed parking area location looks good, as it is located away from the wetlands and creek and is close to where there is currently a parking area. We recommend a non-paved parking area to avoid additional impervious surfaces in this open space.

Picnic Structure – A small picnic structure would be a nice complement to a park focused on slow quiet recreation. The historic Mercer Cabin (now on-site at Karns Meadow) should be explored as a picnic or educational structure that could have use in the meadow.

Bathrooms – We support the use of portable toilets that will have a smaller footprint and could be removed in the winter.

Below are other considerations for proper stewardship of Karns Meadow:

Winter closure – This meadow should not be open for human use in the winter. As we know, winter is the hardest time of year for our local wildlife. Karns meadow is suitable habitat for mule deer, elk, and moose crucial winter range as well as trumpeter swan and bald eagle winter habitat. Human use in winter would add significant stress for wildlife in an already stressful season. The Environmental Assessments concludes, "The gains to recreational opportunities by an approximately 1.0-mile loop pathway are outweighed by the wintertime impacts to wildlife habitat." The solution is simple – a winter closure of the meadow.

Flat Creek Floodplain – Karns meadow is the only stretch of Flat Creek in Town with an intact floodplain that can accommodate seasonal flooding (the low-lying, undeveloped, wetland complex surrounding the creek on both sides). Currently the creek can naturally connect to the floodplain, reducing flooding risk elsewhere along the creek while also benefiting the wetland and riparian functions of the meadow. Development of a pathway encircling and traversing this wetland would disrupt Flat Creek's natural connection to its floodplain, would require non-natural flood mitigation efforts, would increase the likelihood of floods on other parts of flat creek, and will negatively impact the meadow seasonal hydrology, a critical part of riparian systems.

No Dogs – As in other parks in Town, dogs can be a nuisance or danger to wildlife and other humans. Dogs should not be allowed in Karns Meadow, especially recognizing the importance of this meadow for wildlife habitat.

Vegetation management – The native riparian vegetation in the meadow is the foundation of this habitat. Removal or pruning of vegetation should be done sparingly and in accordance with the allowable purposes detailed by the conservation easement. Some troubling language concerning vegetation removal that violates the conservation easement is included in a draft management plan for Karns Meadow under Law Enforcement and Crime Prevention (Teton County Parks and Recreation 2020). Here, the management plan includes "actively prune and reduce vegetation on the west side of Flat Creek to provide improved site lines and eliminate areas to hide." Improving site lines is not an allowable purpose for vegetation removal in the language of the easements, and "places to hide" are the very habitat features we seek to preserve because they are important to wildlife.

Enforcement of no camping or night use – Illegal camping has been a problem in Karns Meadow during the summer months. This use is harming the resource and the no camping or night use policy must be enforced by nightly sweeps by law enforcement in the meadow.

Times have changed – It is a different world than that of 2003 when the Town started acquiring these parcels and making plans for the meadow. Plans that were laid 20 years ago need to be refreshed, re-thought, and adapted to modern times. Much has changed in the last two decades, including: more pathways, more winter grooming, more density and development in town and surrounding the meadow, deteriorating water quality in Flat Creek, declining wildlife populations (moose and mule deer), climate change disruption, increased flooding potential, and a

burgeoning human mental health crisis. Karns meadow can be part of the answer to these challenges – as it cleans and stores our water, sequesters carbon, provides habitat and travel corridors, provides a natural floodplain to accommodate high spring flows, and rejuvenates us humans who are more stressed than ever. Furthermore, Karns can also serve as a powerful example of how our community can come together and make decisions that truly steward our ecosystems for long-term sustainability.

As our town leaders, we are depending on your wise decision making to lead our community forward in a way that is true to our shared values and sustainable for future generations. I hope I have convinced you to protect the incredible ecological values of Karns Meadow by practicing the precautionary principle -- doing as little development as needed, and understanding that some allowable uses, like a paved pathway, will have impacts that outweigh their benefit. There are many competing interests pulling Karns meadow different directions – in situations like this, we should turn to our Comprehensive Plan for guidance – our community values are well spelled out here – "As ecosystem stewards, we will ensure the health of all native species by avoiding habitat impact and fragmentation, maintaining water quality, and limiting our contribution to climate change."

I hope you will decide to protect the ecological values of Karns Meadows by considering a more ecologically sound park design that avoids a paved pathway cut-through and encourages slow, quiet connection to nature. I would be happy to discuss these ideas further, thank you for considering these comments.

Sincerely,

Kevin Krasnow, Ph.D.

Conservation Director

The Jackson Hole Conservation Alliance

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