



## JH Public Art + Bland Design

### Initiative to install silhouettes in Wildlife Crossings



#### Summary

JH Public Art, in collaboration with Bland Design is launching a new initiative to use public art to decrease wildlife and vehicle collisions in Teton County. The initiative seeks to increase the number of reflective silhouettes sited in designated wildlife crossing corridors by developing a cost-effective design, and partnering with local non-profits to increase awareness of their availability, and partnering with private landowners to host silhouettes.

JH Public Art will manage the overall project including sales and marketing, and will coordinate with local NGO's working in wildlife advocacy to increase awareness of this initiative. Bland Design will work on product development, building on each silhouette design to refine for manufacturing efficiency. Through design, fabrication, and installation the team will value engineer the design and installation process to produce a cost-effective series of silhouettes that can be made available on a large-scale. Our goal is to start small on the local level, building a proof of concept that can scale regionally. Ultimately, wildlife crossings are a national issue and we think this initiative has the potential to influence highway signage graphic standards.

## Project Background & Context

Jackson Hole Public Art has offered a program called Building STEAM where our former artist-on-staff, Bland Hoke, works to empower students to build public art installations that address a community need. JH Public Art would solicit project ideas from community organizations to bring to local students who then worked with Hoke to develop creative solutions to local issues. Hoke then led the work to build promising prototypes into full-scale models to test. Past results from STEAM projects have ranged from large-scale temporary installations to permanent, functional artworks.

Our go-to classroom has been the Fabrication Lab at Jackson Hole High School. In the FabLab students learn how to use 3D printers, laser engravers, milling machines, and 3D modeling programs. Hoke and FabLab instructor Sammie Smith lead the students through the entire design process, and as a professional artist and designer, Bland would produce high-quality, professionally constructed artworks at The Shop located one mile from the school, at times with assistance from the students.

Bland Hoke was raised in Jackson, and is a public artist specializing in collaborative design, resourceful thinking, and strategic project planning. Bland was employed as the artist-on-staff at Jackson Hole Public Art from April 2013 through October of 2018.

In 2017 Ryan Nourai from the JH Conservation Alliance and a team of stakeholders presented the Wildlife Crossing Plan to the FabLab students. The plan identifies priority sites for wildlife mitigation and recommends specific solutions to improve motorist and wildlife safety.

Local student Zach Wientjies, in collaboration with Bland Hoke, came up with a reflective animal silhouette design based on the idea that the silhouette should light up at night to alert drivers. Zach disliked the abrasive nature of existing signage with blinking lights and the two developed an aesthetically appealing design. The challenge was to fabricate only the outer edge of an animal to light up. A moose was prototyped and installed on private property along Highway 390 where moose are frequently seen crossing the road and passing by the silhouette. The prototype was designed using plywood and microprismatic reflective sheeting that brightly reflects the animal's outline when oncoming vehicle headlights shine on it. The silhouettes are life-sized or larger, and are designed to be visually beautiful with the distinct benefit of being moveable to address changes in migration patterns, and to keep drivers alert.

Compared to highway department signs, the wildlife silhouettes have great advantages. The current silhouettes in prototype form, cost almost the same installed as standard yellow diamond blinking wildlife crossing signs after installation. The multitudes of traffic signs along roadsides become visual noise we tune-out, decreasing their effectiveness. The reflective silhouettes are not only visually appealing; they are unconventional and sculptural making them pleasing to look at and therefore more effective than a standard traffic sign. The silhouettes are installed like temporary construction signage and can be relocated to respond to seasonal migration patterns. By moving the silhouettes, we contribute to their visibility and their effectiveness.

Research indicates that standard warning signs are unlikely to be effective in reducing collisions and signs that are specific to time and place can be effective in reducing collisions. *Wildlife Warning Signs and Animal Detection Systems Aimed at Reducing Wildlife-Vehicle Collisions*. Huijser, Marcel & Mosler-berger, Christa & Olsson, Mattias & Strein, Martin. (2015).

## **Stakeholders Roles and Responsibilities**

This initiative came to life through the Building Steam program funded by JH Public Art (JHPA). JH Public Art will oversee and manage sale of silhouettes, coordination with stakeholders, advocacy, and messaging. The short-term goal is to generate sales locally to allow the silhouettes to market themselves through their positive impact and presence on the highway. The long-term goal is to build on local success, and to continue to refine the product in order to advocate for expanding use of the silhouettes on a regional level.

Bland Design, will oversee product development for the silhouettes including; value-engineering and manufacturing tools. Opportunities for students will be offered through School to Careers, initially focused on working with Zach Wientjies and potentially expanding if silhouette sales create the need for additional assistance. The goal of doing so is to provide skill training in a fabrication capacity and realizing improvements in design through making.

JH Public Art is covering the cost to provide overall project coordination including sales, marketing materials and public relations, and administrative support. JHPA coordinates fabrication with Hoke, installation with landowners, communication with donors, information from wildlife and migration non-profits and specialists, local government, private landowners, and DOT's.

The non-profits have provided current research on Wildlife Crossings and migration patterns to help inform the placement of the silhouettes, and they will assist in raising awareness with citizens potentially interested in purchasing a moose (by sharing marketing materials). The sales of silhouettes will not be limited to sites identified in the Wildlife Crossing Master Plan. Participating NGO's will be listed on the JHPA website and all donors who purchase a silhouette will be listed there as well.

### **Be Todays Solution – sponsor a moose**

(Coming soon: elk, deer, pronghorn)

By sponsoring an animal silhouette, you can be part of today's solution. The silhouettes are priced to include the cost of materials, fabrication, installation and funds to advance design development, including value engineering and manufacturing efficiency.

Cost \$3,250

## **Key Stakeholders**

JH Public Art, Initiative lead

Bland Design LLC, design, fabrication, value engineering

Teton County, Coordination with Wildlife Crossing Plan

The Jackson Hole Conservation Alliance – Raise awareness, provide current research

National Elk Refuge – Host site

JH Land Trust and R Park – Host site

JH Wildlife Foundation - Raise awareness

Greater Yellowstone Coalition - Raise awareness

Jackson Hole High School FabLab - Research, prototyping

Zach Wientjjs, Local Student Designer

## **Research**

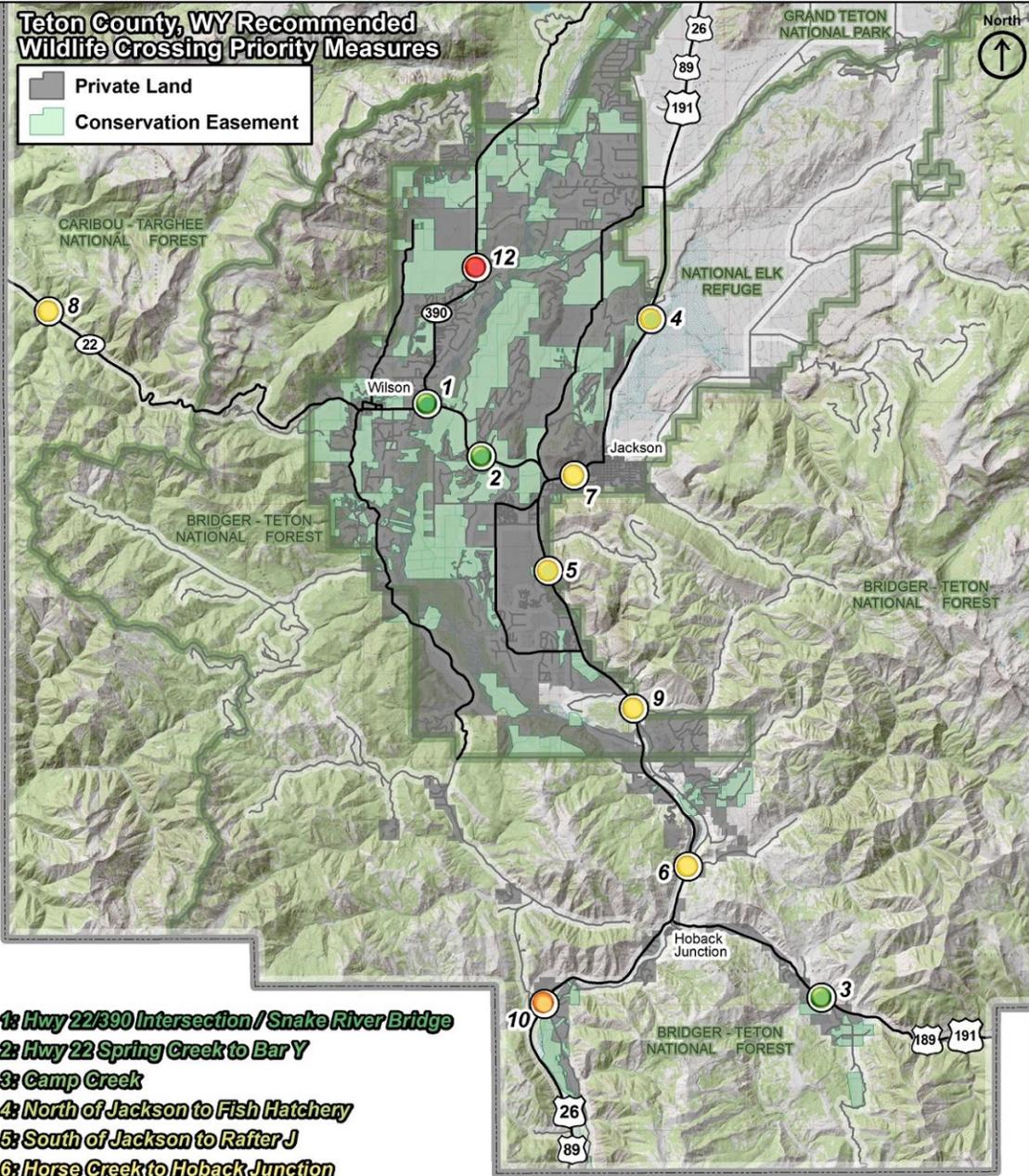
*Wildlife Warning Signs and Animal Detection Systems Aimed at Reducing Wildlife-Vehicle Collisions. Huijser, Marcel & Mosler-berger, Christa & Olsson, Mattias & Strein, Martin. (2015).*

Wildlife warning signs are among the most frequently used mitigation measures aimed at reducing wildlife-vehicle collisions (WVC). Road agencies have been using these signs for many decades, and their use has become standard practice in most parts of the world. 24.1 Warning signs are intended to reduce the rate and severity of WVC, not the barrier effect of roads and traffic. 24.2 Warning signs must be reliable if they are to be effective. 24.3 Standard and enhanced warning signs are unlikely to be effective in reducing collisions. 24.4 Warning signs that are place and time specific can be effective in reducing collisions. 24.5 Adopt a stepwise approach when implementing an animal detection system. 24.6 Warning signs can be used with other mitigation measures..

10.1002/9781118568170.ch24. Wildlife warning signs are among the most frequently used mitigation measures aimed at reducing wildlife-vehicle collisions (WVC). Road agencies have been using these signs for many decades, and their use has become standard practice in most parts of the world. 24.1 Warning signs are intended to reduce the rate and severity of WVC, not the barrier effect of roads and traffic. 24.2 Warning signs must be reliable if they are to be effective. 24.3 Standard and enhanced warning signs are unlikely to be effective in reducing collisions. 24.4 Warning signs that are place and time specific can be effective in reducing collisions. 24.5 Adopt a stepwise approach when implementing an animal detection system. 24.6 Warning signs can be used with other mitigation measures.

# Teton County, WY Recommended Wildlife Crossing Priority Measures

-  Private Land
-  Conservation Easement



- 1: Hwy 22/390 Intersection / Snake River Bridge**
- 2: Hwy 22 Spring Creek to Bar Y**
- 3: Camp Creek**
- 4: North of Jackson to Fish Hatchery**
- 5: South of Jackson to Rafter J**
- 6: Horse Creek to Hoback Junction**
- 7: Broadway**
- 8: Teton Pass West Side**
- 9: Game Creek**
- 10: Dog Creek**
- 11: Blackrock/Togwotee (Not Shown)**
- 12: WY 390**

