ATV Trail Mapping in Jordan Creek Watershed

FY 2006-2007



Prepared by Juneau Watershed Partnership for the Department of Environmental Conservation Nonpoint Source Pollution Program Task # 5 Project ACWA-07-07

Introduction

In order to reduce sediment input and streambank degradation in the upper reaches of Jordan Creek, the Juneau Watershed Partnership (JWP) characterized and addressed motorized recreational use during the 2006-2007 fiscal year, as suggested in the Jordan Creek Watershed Recovery and Management Plan (2006). JWP accomplished this by using GPS and GIS to map all-terrain vehicles (ATV) trails and access points. JWP is partnering with the local Trout Unlimited chapter and the local organized ATV group, Rough Riders, to close and revegetate unauthorized trails, and to assist them with working with the City and Borough of Juneau (CBJ) to identify and establish acceptable riding areas and/or trails. JWP has notified CBJ of unauthorized ATV use in upper Jordan Creek Watershed (and unauthorized squatter camps that contribute to debris and vegetation degradation), but with limited enforcement personnel we may need to revisit this area regularly and provide updates throughout the year. After meeting with the president of Rough Riders, James Tripp, it is apparent that this 115- member ATV user-group is aware and concerned about the detrimental effects of stream degradation on downstream fish habitat and are interested in assisting with public education and signage to deter the less-concerned ATV users.

Method

JWP staff walked the trails in the Jordan Creek Watershed with a GPS in an effort to map ATV use. Prior to heading into the field, we were warned that it would be difficult to obtain a satellite signal in such close proximity to Thunder Mountain, even with a higher quality GPS unit such as the Trimble GPS that was donated to this project by UAS. Consequently, in addition to walking the trails with the GPS unit, we nested point data when satellite reception was good and took hand notes to complement the GPS data and safeguard against the possibility of no data being stored. Once the data was downloaded, the GPS line data (trails) were compared with the nested points and hand drawings and it was determined that the digital line data was not 100% consistent. Therefore, after a first draft of the map was created, we revisited the area several more times to ground-truth the mapping effort and look for new signs of motorized use. The final map is located on the last page of this document.

Results

Trail development in Jordan Creek Watershed originated with historic logging and military roads. It is thought that the bridge at the end of Sasha Ave. was built as a crossing for one or both of these uses (Photo 1). No other older/ abandoned bridges like this were observed crossing Jordan Creek except

immediately downstream of Egan Drive (almost adjacent to the highway). As a result, ATV users and others traveling on the trails in the watershed have had to travel through the stream.



The primary stream crossing that we observed was at the end



Photo 1. Abandoned bridge over Jordan Creek at end of Sasha Ave.

of Valley Boulevard (Photo 2). This used to be a major access point to the trails but was successfully closed off by a Southeast Alaska Guidance Association (SAGA) crew organized by the U.S.

Photo 2. Revegetated ATV crossing on Jordan Creek at the end of Valley Blvd. Note the shadows of spawning pink salmon. August 29, 2006

Fish & Wildlife Service in 2005. Earlier attempts of posting signs were unsuccessful as the signs were used as target

practice and eventually stolen/ removed. The successful closure at Valley Boulevard consists of a heavy chain hung from two trees across the entranceway, a bullet-hole ridden sign, and hundreds of feet of felled trees crossing the trail. It appears that it was the removal of the trail (by covering it with downed trees) that closed this access point because, otherwise, people could have constructed a new way around the chain to access the trail.



Photo 3: The old road in the forest at the base of Thunder Mountain in Jordan Creek Watershed. August 29, 2006

By following the recently covered access trail at the end of Valley



Photo 4: Unauthorized ATV trail crossing a tributary and the toe of an avalanche path on Thunder Mountain in Jordan Creek Watershed. August 29, 2006

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road (Photo 3). This is the main path through the north-south axis of the watershed and has several spur trails shooting off of it. At the toe of several of the avalanche paths coming off Thunder Mountain there was evidence of ATV "high marking" and stream crossings on these tributaries (Photo 4). In several different places water from the tributaries left the channel and followed the path of

Boulevard we intersected the main trail in the area, the old logging

the ATV trails and was picking up and transporting fine sediment from the trail (Photo 5).

No fresh tire tracks from recent use were observed in fall 2006 except for one single track from a motor bike. Obvious access points that have been closed off include trailhead closures via boulders and posts on U.S. Forest Service land in the upper watershed, the SAGA/ USFWS closure on Valley Boulevard, and City & Borough of Juneau closures near the water tower (gating the road and piling brush on trails spurring off the water tower access road at the edge of the forest). It appeared that the closure of these access points reduced use during the 2006 summer. However, 2006 was a



particularly rainy summer and it is possible that any use earlier in the summer was not evident due to the heavy rains washing away tracks.

Photo 5. Jordan Creek tributary flow rerouted onto an unauthorized ATV trail. Notice the fine sediments that are being transported. August 29, 2006



Photo 6. ATV tracks in the spring mud near an avalanche toe in Jordan Creek Watershed. May 2007.

In May 2007 JWP revisited the upper watershed to field-check the preliminary map and look for evidence of recent motorized activity. We only saw one set of new tracks near one of the avalanche paths (Photo 6), but that may have been because the late snowmelt kept folks out or washed away other tracks. Unfortunately, in addition to the tracks we also discovered empty gas cans left at a site that appeared to be a regular camping spot in the summer months (and a groundwater upwelling site in the spring) (Photo 7).

Recommendations

Historically, ATV use was allowed on the U.S. Forest Service managed lands in the Dredge Lakes area. This activity is no longer permitted due to the evident soil compaction, vegetation damage, erosion, and increased stream sediment that was caused by ATV use. Jordan Creek Watershed has numerous wetland floodplains that are



Photo 7. Gas cans left near a campsite next to Jordan Creek.

readily damaged by ATV use through compaction of the soils and peat, altered wetlands function, and

increased erosion. It is unacceptable to allow this illegal use and the resultant damage to occur in Jordan Creek Watershed. Education, outreach, eliminated access, and continued monitoring should be implemented to maintain the forest, wetland and stream habitats in Jordan Creek Watershed.

The access point at the end of Valley Boulevard that was closed off by the U.S. Fish & Wildlife Service (USFWS) and SAGA, the access point closed off at the U.S. Forest Service trailhead off Mendenhall Loop Road in the upper watershed, and the water tower access road that was gated by CBJ appear to have been the main access points for ATV users into Jordan Creek Watershed and appear to have reduced ATV use in Jordan Creek Watershed. Two backyard trails on Kanat'a Street still allow ATV access into the watershed. Residents in this neighborhood were invited to the February 2007 "Get to Know Jordan Creek" event hosted by JWP where JWP presented this ATV mapping effort and ATV outreach in an effort to educate residents to the detrimental effects of ATV use in the watershed and raise general awareness of and appreciation for Jordan Creek.

It appears that people are trying to remove the felled trees that the USFWS and SAGA laid across the trail at the Valley Boulevard access point. ATV use should be continuously monitored in the watershed to prevent reopening of this and any other access points. Trailheads on private land at the end of Nancy Street and Sasha Ave. showed evidence that a motorized vehicle had been driven very short distances at these locations, but it did not appear that there was regular use and, due to the fact that they are on private land and do not connect with any other trails, they do not appear to actually be "trails". However, the greatest concern at these locations is that the vehicles are being driven through the actual stream, so these sites should also be monitored occasionally. A partnership between JWP and the Rough Riders will aid communication, education, and outreach of ATV use in sensitive riparian areas and will promote "peer pressure" among users. One of the most important things that can happen in CBJ for unauthorized ATV use is to provide designated ATV use areas for legal, controlled, and enforced riding. JWP and Rough Riders will continue to work with CBJ on this.

