

K-Beach Road High Water Drainage Task Force
c/o Jim Munter, 5701 Penny Circle, Anchorage, AK, 99516

February 9, 2015

Mr. David W. Schade, MPA
Section Chief
Water Resources Section
Division of Mining, Land & Water
Alaska Department of Natural Resources
550 West 7th Avenue, Suite 1020
Anchorage AK 99501

Re: Potential unauthorized diversions of more than a significant amount of water

Dear Mr. Schade:

As you are aware from the recent discussions at the January 23, 2015, meeting of the K-Beach Road High Water Drainage Task Force, we are concerned about potential unauthorized diversions of more than a significant amount of water (as defined by DNR regulations) by the Kenai Peninsula Borough at roadbeds they own and manage. Residents have detected a pattern of roadbeds being raised by application of additional gravel and of inadequate drainage by culverts in numerous areas. Appeals by residents to improve drainage through culverts have been rejected many times.

This problem was exemplified during discussions at the December 8, 2014, meeting of the task force where the situation at the intersection of Eastway Road and Patrick Drive was discussed. On October 12, 2014, water was observed flowing across Eastway Road near Green Forest Drive and down a ditch along the east side of Eastway Road towards the north (see Photo 1). When the water reached Patrick Drive, it was pooling up and impounded by Patrick Drive at Eastway Road (see Photo 2) because there are no culverts whatsoever at that intersection. The Borough's maps show that the natural direction of water flow in that area is generally to the northwest. When the water level builds up too high, a local resident reportedly uses a pump and hose to pump the water diagonally across the road intersection in a northwesterly direction. On October 12, 2014, eroded soils characteristic of pump discharge were observed on the northwest corner of the intersection. When the need for culverts under this intersection was discussed at the meeting, Mayor Navarre responded that the Borough did not intend to put a culvert at that location because of potential liability issues related to the movement of water downgradient from the intersection. The borough does not seem to realize that its construction and maintenance of a road structure that dams and diverts water creates liability issues of its own and appears to require authorization from your department. You explained at our recent Task Force meeting that your jurisdictional authorities include frequently working with local, state, and federal agencies on authorizing their proposed diversions of water in Alaska.

In general, poor drainage of water and retention of water in the neighborhoods may create potential liability issues by those diverting (or damming) water. High water levels in this area have reportedly caused flooded leachfields, mold in homes, foundation damage, personal property damage, ruined flooring and drywall and other problems (see attached spreadsheet). Continuing high water levels in this area threaten additional severe flooding during the next

significant rainfall or snowmelt event. Residents now understand the simple concept that better drainage is need in many areas, including road and driveway culverts and that the Borough's diversions of water created by the damming effects of its roadbeds are not helpful and potentially in violation of State regulations under your program.

Following is a list of roads where there may be unauthorized diversions of water caused by the roadbeds. Some of these have been worked on recently with funds reimbursed through the State Division of Homeland Security and Emergency Services and the Federal Emergency Management Agency. If these funds were expended without obtaining proper authorizations for water diversion from your department, then an expedited remedy would be in order. In addition to these streets, we are aware of multiple instances where culverts are not properly emplaced under driveways.

Table 1. Roads that are potentially diverting more than a significant amount of water during rainfall or snowmelt events.

Patrick Drive	Karluk Avenue	Jones Road
Eastway Road	Ebb Tide Drive	Matanuska Street
Buoy Avenue	Bore Tide Drive	Murwood Avenue
Green Forest Drive	Kalgin Drive	Tiller Avenue
Farmstead Avenue	Westway Road	Cork Line Drive
Dana Bayes Drive	Bjerke Street	Farr Street
Wendy Lane	Lori Jo Street	K-Beach Road
Scotch Run	Scott Avenue	

As you can see, the large number of these locations suggests that there is a system-wide drainage problem in the area that the Task Force believes may have been exacerbated by Borough actions or inactions associated with road construction or maintenance activities. We need relief from these actions or inactions and better drainage of water towards its natural drainage courses, and we understand that your office is responsible for regulating diversions of water flow and you may be able to be of assistance in fixing this problem.

We also understand that some of the drainage problems in the area are related to inadequate drainage under K-Beach Road, which is a major State-maintained road. We invite coordination with AKDOT&PF to work towards a comprehensive understanding and solution of these problems.

The Alaska Department of Environmental Conservation should also be interested in this problem, as they have review and approval functions for septic systems and public water supplies, which could be at risk from inadequately treated domestic wastewater.

Short term, the Task Force is interested in cessation of potential unauthorized roadbed diversions managed by the Borough, by enforcement action from your department, if necessary. This can occur through authorization by your department for diverting a significant amount of water or by installation of drainage improvements to allow water to flow towards its natural discharge areas. In either case, we will be looking for professional engineering analysis, including calculation of storm design flows using standard methodologies. There can be little doubt that these calculations will demonstrate that more than a significant amount of water is diverted by these roadbeds during major storms. As a side benefit, the Borough's and the State's retention and

application of engineering expertise and suitable capital projects will in all likelihood lead to acceptable mitigation of the Borough's perceived potential liabilities as expressed by Mayor Navarre. Longer term, we also recognize the need for comprehensive drainage and flooding analysis and feasibility study work in this area, however it will likely be several years before the results of such a study comes to fruition and the pursuit of such studies does not relieve from DNR the burden of taking more immediate action in the face of these potential unauthorized diversions of water.

We invite you or another representative from your department, and representatives from the Kenai Peninsula Borough, AKDOT&PF, ADEC, Alaska Division of Homeland Security and Emergency Services, and FEMA to address these issues and respond to questions at the next meeting of the Task Force on February 23, 2015, at 6:00 pm. The location has not yet been determined, but we will let you know as soon as it is.

At that meeting, we will also address potential membership on the task force for any agency that would like to participate. The Task Force is intended to be a forum with broad participation from interested people and agencies to discuss and try to find solutions to these thorny high-water problems. Of course, no agency relinquishes any of its authorities or obligations by participating in the task force process; rather, through communication, the intent is to create an atmosphere in which agencies can better fulfill their missions.

Sincerely,



Jim Munter
Co-Chair
K-Beach Road High Water Drainage Task Force



Toby Burke
Co-Chair
K-Beach Road High Water Drainage Task Force

cc: Kenai Peninsula Borough
Alaska Department of Transportation and Public Facilities
Alaska Department of Environmental Conservation
Alaska Division of Homeland Security and Emergency Services
Federal Emergency Management Agency

Attachment

Spreadsheet of flood damages