

02014-32

Subject: FW: Letter to KPB Assembly Regarding Ordinance 2014-32
Attachments: Borough Assembly Letter Regarding Ordinance 2014-32 2015-12-07.docx

From: Toby Burke [mailto:kenaibirder@gmail.com]
Sent: Monday, December 07, 2015 12:28 AM
To: Blankenship, Johni <JBlankenship@kpb.us>
Subject: Letter to KPB Assembly Regarding Ordinance 2014-32

Kenai Peninsula Borough Assembly,

Though I previously submitted a letter regarding ordinance 2014-32 on October 4, I respectfully request your thoughtful review and reconsideration of this new and substantially expanded letter in opposition to the ordinance. The ordinance is scheduled to be discussed and possibly voted upon on December 8, 2015.

The letter is attached.

Sincerely,

Toby Burke
K-Beach Resident
335-1558

REASONS FOR OPPOSING KENAI PENINSULA BOROUGH PROPOSED ORDINANCE 2014-32

I. The 4.3 acre former barrow pit of the 9.2 acre "Keohane parcel", owned by Paula and Timothy Keohane, at the intersection of Karluk Avenue and K-Beach Road should not be obtained nor reserved in any way for a short or long-term storm water runoff (SWR) retention and leaching basin for the following reasons:

A. The approximately 3.5 million gallon capacity of the depression is, hydrologically speaking, a veritable thimble. Its relatively small capacity is quickly reached and exceeded as demonstrated in the fall of 2013.

B. During flood events the basin will already be significantly filled by elevated ground water before SWR is diverted to it, as it was in 2013. Thus the basin will already be significantly compromised at the time its entire, yet very modest capacity is most needed.

C. Diverting millions of gallons of SWR into the basin will only exacerbate severe high ground water problems in the surrounding neighborhood as the enormous hydrostatic pressures of the heavy body of water pushes outward in all directions, toward neighboring residential properties and DOT's K-Beach Road bed which will already be saturated to capacity.

D. Has the proposed SWR retention basin been properly engineered? NO. Is the SWR retention basin to be lined with an impermeable membrane to stop infiltration from further elevating local ground water levels and damaging neighboring properties? NO. Are neighboring property owners aware of the risks the unengineered, unlined SWR retention basin presents to them and that it effectively serves to leach its load into surrounding sediments further increasing already critically high ground water levels in nearby residential areas and potentially accelerating erosion along the densely populated bluff face? NO.

E. In 2013 the Borough administration justified the use of the basin as an emergency, stop-gap measure and vowed to seek a permanent drainage solution once the emergency passed. Does this ordinance not renege on that promise made to local residents and DOT? YES. Does this not merely "kick the can down the road" and put off the day of reckoning by continuing to rely on this most unreliable and destructive retain, leach, and pump SWR management strategy - making the expediency permanent? YES.

F. Are adjacent bluff property owners likely to continue to allow the Borough to pump SWR across their properties when the basin cannot leach its load fast enough and is overwhelmed as it was in 2013? MAYBE. And even if they do, will they not likely seek a lucrative compensation deal for rendering a perceived public service during an emergency just as the Keohanes are now? MAYBE. Does this set a fiscally and morally unsound precedent? DEFINITELY.

G. Kenai Peninsula Borough municipal code 14.06.170 explicitly defines road construction standards, in regard to drainage and culverts.

"Roads shall be constructed to prevent ponding of runoff waters in roadside ditches. Drainage ditches shall be constructed such that runoff waters shall be conveyed to natural drainage courses, ditches or waterways, or other man-made drainage courses. Outfalls shall be constructed to prevent excessive siltation of riparian habitats, channel erosion, or other damage to public or private property. The RSA board may require an engineering analysis and design for locations susceptible to flooding, siltation or other natural conditions potentially damaging to the right-of-way, adjacent property, or water courses and water bodies."

Accordingly, the Borough administration is deliberately violating its own municipal code (law) by, 1. intentionally allowing SWR to pond in roadside ditches throughout the entire 2013 K-Beach flood area; 2.

intentionally preventing the conveyance of SWR to natural or man-made drainage courses and outfalls; and
3. intentionally withholding engineering analysis and design from locations that have historically proven to be susceptible to flooding, consequently causing damage to adjacent property.

Keep in mind that 14.06.170 does not allow for roadside SWR to be conveyed to drainage galleries, leach fields, nor retention ponds for the purpose of percolating SWR into the ground - though it is common practice by the Borough's RSA.

Even though the case could be made that these are sound and practical engineering practices in certain circumstances, they assuredly are not in areas that suffer from recurring high ground water. Employing such engineering structures in hydrologically unsuitable places is not only ineffective but only serves to compound the high ground water problem further. The proposed KPB ordinance 2014-32 intention to direct roadside SWR to the Keohane basin is in direct violation of 14.06.170 and will expose the Borough to legal challenge(s) with a high potential for incurring substantial legal costs and damages.

H. The Borough administration has assured K-Beach residents they have data indicating that flooding on the magnitude of the 2013 K-Beach flood occurs only once every 30 years which they contend does not justify constructing a K-Beach SWR drainage network. If that is so, then why are they actively seeking a drainage easement on the Keohane property when a flood recurrence is deemed unlikely in the sort and long-term? The logic is faulty and inconsistent.

I. The Keohane's basin is situated beside the Karluk Avenue right-of-way (ROW). SWR conveyed along Karluk Avenue can only with much difficulty go anywhere but into the Keohane's basin since it slopes into the ROW. No elevated buffer strip was retained between it and the basin. Mining up to or into the ROW made the excavated basin more prone to flooding. Owners of the parcel assume the liability of the excavated basin which permanently altered the natural topography and drainage of the area.

II. The 1.84 acre "Borough property" at mile 12.1 K-Beach Road along the Cook Inlet bluff should not be sold, exchanged, subdivided, or impaired in any way that might prevent or constrain the construction of a future drainage structure, its long-term maintenance, and future enhancements for the following reasons:

A. The Borough owned parcel is invaluable to Borough taxpayers and K-Beach residents since it would serve as the most likely location for a large drainage structure to move SWR from inundated area roads (Dogfish, Trawling, Buoy, Equestrian, Karluk, and their interconnecting roads) safely and efficiently under K-Beach Road to the waters of Cook Inlet. It's likely the construction of such a structure could not realistically be limited to a narrow ROW. Prudence would dictate the entire parcel be retained for construction needs - excavation, material storage, heavy equipment operation and storage, and the movement of large trucks transporting materials on and off site. A miscalculation of the future structure's size and requirements could needlessly prevent or curtail construction, ultimately multiplying its complexity and costs. Maintaining future options by retaining the entire parcel, not merely a narrow corridor, is the wisest course. The K-Beach Road culvert at Dogfish Avenue should be a sobering lesson as the Borough liquidated this strategic drainage parcel and thereby failed to preserve options for future structure maintenance or enhancement.

B. Retaining the entire Borough owned parcel preserves the more efficient option of quickly moving storm waters via graded ditches across public property to Cook Inlet instead of retaining, leaching, and pumping SWR on and across private properties.

C. It is not yet been legally established if the original federal patent on the parcel, established in 1965, dedicating the entire parcel to drainage purposes can be ignored or just matter-of-factly put aside for

expediency's sake. Again it would be imprudent to trade, sell, or subdivide this parcel before its legal status is well established. Acting in haste may leave taxpayers footing the bill if the parcel is disposed of and later, by necessity, needs to be repurchased.

III. The ordinance merely serves to further the Borough administration's failed policy of holding SWR within the K-Beach area, which is technically and morally indefensible.

The Borough needs to stop worrying about compensating the Keohanes for their flooded basin, admittedly nothing more than a frog pond, which has always been subject to flooding during high water events by virtue of its low elevation and instead compensate the residents of the K-Beach area with roads that adhere to the mandated standards of its own municipal code - providing roadside ditches that actually convey SWR under K-Beach Road to outfalls along Cook Inlet and the Kenai River. The secret deal the Borough administration evidently crafted with the Keohanes should not be honored - a deal providing valuable Borough owned waterfront real estate or the monetary equivalent (that may significantly exceed the entire Borough assessed value of their entire 9.2 acre parcel) in exchange for a 4.3 acre drainage easement within their larger parcel. Does the phrase "quid pro quo" come to mind?*

This proposed ordinance is misguided, inequitable, and deeply offensive to K-Beach residents. The former barrow pit turned frog pond is a vacant parcel, which according to the Borough assessing department has no improved value. It was already flooded by ground water intrusion before SWR from the Karluk ROW overflowed into it. The basin has not been impaired in any way. Any perceived loss by the Keohane's is incomparable to the authentic loss suffered by neighboring residents, many of whom abandoned their flooded homes for weeks until flood waters receded, only to return to damaged and degraded homes.

The K-Beach flood area, not coincidentally, is a network of roads conspicuously lacking outfalls to relatively close natural water bodies. There are none between Dog Fish Avenue and Chine Circle, a distance of 3.4 miles. K-Beach Road clearly acts as a dam to SWR from the vast residential areas behind it. Even the Dog Fish and Chine culverts that bookend this area are considered undersized and cannot reliably be expected to handle large volumes of SWR, a point of great concern that DOT has expressed more than once to Borough administrators. But seeking to avoid the expense of enlarging existing culverts and adding new ones under K-Beach Road, they've assured DOT they will do everything in their power to prevent additional SWR from reaching (and potentially endangering) the K-Beach Road bed.

Accordingly, Borough administration policy has been to keep SWR bottled up within the K-Beach area. This is accomplished by, 1. retaining SWR in newly enlarged and newly constructed roadside ditches and basins that increase retention capacity without the benefit of any outfalls in the hope waters will eventually percolate; 2. vigorously opposing the upsizing of current SWR outfalls and the construction of additional outfalls; and 3. blocking and forestalling the maintenance or improvement of old roadside ditches and the construction of new roadside ditches and other drainage structures that if fully functional would with certainty direct additional SWR unimpeded to K-Beach Road.

At first appearance it might seem like the Borough administration made several good faith efforts to provide flood relief to area residents during and after the flood but closer scrutiny proves the opposite true. For instance a local permitted resident enhanced roadside ditches along Trawling Avenue in the face of Borough inaction during the height of the 2013 flooding. He acted independently, at his own expense, diverting millions of gallons of SWR per hour, for several consecutive weeks, away from area residences and under K-Beach Road. This action alone dwarfed all Borough efforts to move SWR over K-Beach Road. Instead of being commended he's been publically skewered by the Borough administration because, get

this, his ditching did not meet Borough municipal code 14.06.170 standards?! In reality they were livid with him because he greatly increased SWR volumes reaching K-Beach Road. Regardless, SWR diverted away from area residences by the Trawling Avenue ditch continues to challenge the capacity of the 4' culvert under K-Beach Road at Dog Fish Avenue each and every fall - to the consternation of DOT.

In marked contrast, another K-Beach resident and current assemblyman, without the benefit of a Borough issued permit, excavated two illegal SWR retention and leaching basins on a Borough-owned parcel abutting Eastway Road. His efforts were lauded by the Borough yet the basins did not convey any waters to the nearby Kenai River nor mitigate local flooding one iota. The practice of directing SWR to already flooded basins situated amid flooded residential neighborhoods is akin to baling water out of the stern of your boat and emptying it back into the bow, rather than overboard as common sense would normally dictate.

In another instance, the Borough administration spent a considerable portion of its federal disaster relief funds on adding massive quantities of gravel to road surfaces in the K-Beach's flood area. The gravel substantially raised the elevation of area roads. Although seemingly beneficial, without the addition of numerous cross-culverts to equalize SWR on both sides and ditches to convey them to outfalls, the higher roads serve merely as higher dams destined to exacerbate future flooding.

Additionally, Buoy Avenue which had only old, unmaintained, and discontinuous ditches, did not receive any upgrades until a full year after the disastrous 2013 flooding. And this was only brought about by residents threatening legal action since roadside ditches still held pooled SWR in 2014. The Borough administration reluctantly responded by ditching 6,000' along the south side of the 7,000' road, completely ignoring the north side whose old, unmaintained, and discontinuous ditches held pooled water from September 2012 through April 2015, when by the grace of God they finally percolated. This north side ditch, or rather what passes for one, is still unmaintained, discontinuous, and again retaining water for two thirds of its length.

The newly completed south ditch's dimensions are 5' to 6' wide at the bottom, 12' to 14' wide at the top, and approximately 2.5' deep - a very wide ditch! Why such a wide ditch on merely one side instead of standard dimension ditches on both sides? This very wide ditch by design can hold a substantial volume of SWR yet sluggishly conveys its load, allowing waters increased time and area to percolate into roadside sediments and bordering private properties. And percolate it does. Effectively the Borough has turned lower Buoy Avenue into a gigantic leach field for upper Buoy Avenue. When SWR reaches the roadside ditches in front of my residence on lower Buoy Avenue I see my ground water levels increase 1' to 3' in in as little as 24 hours. The contractor who performed the ditching said if the ditch functioned as designed, little to no SWR would reach K-Beach Road despite the massive volumes it would handle. And so it is. Only under rare circumstances can SWR reach K-Beach Road - specifically when lower Buoy Avenue's ground water is elevated to the bottom of the ditch, sediments saturated, and percolation rates exceeded by yet higher inflow rates.

So the Borough did indeed provide Buoy Avenue with a new large SWR drainage ditch but one that by design stymies flow, enhances percolation, equalizes high ground water along Buoy Avenue's length, floods septic systems of nearby residences, and ultimately retards runoff from reaching K-Beach Road and Cook Inlet. To add insult to injury, along the lowest 500' of the Buoy Avenue ditch, nearest K-Beach Road, the last two driveways each have paired 18" culverts. Of course the ditch at that point has already leached all or nearly all of its SWR load - those culverts rarely see a drop of water. Therefore where SWR volumes are greatest, only single culverts were placed and where SWR volumes are least, paired culverts were placed.

Now remember, the Borough administration contended the 10' drop in elevation from the higher eastern end of Buoy Avenue to its lower western terminus with K-Beach Road provided insufficient grade to permit SWR from flowing downhill and therefore argued against ditching in the first place - regardless the prodigious floods of 2013 had just proven that premise patently false as SWR readily flowed over and around every culvert-less intersection in its path, pooling and forming a lake beside K-Beach Road. But the Borough administration did eventually contract with an engineering firm to design a continuous ditch, but one that stymies SWR by enhancing percolation via a very wide flat bottomed ditch excavated down to porous sediments rather than the more standard narrow "V" or "U" shaped ditch typically employed to convey SWR.

And if there had been a concern about excessive SWR velocities causing ditch erosion and outfall sedimentation (to the point engineers deliberately impeded SWR on a ditch claimed to have so low a gradient it was feared water would not flow - which is absolutely preposterous) then why wasn't there any attempt to stabilize ditch sediments, sides and bottom, by seeding and vegetating, as is universal construction practice? Instead the over-saturated peaty soils in the mid and upper reaches of the ditch being destabilized began sloughing off during the spring thaw of March 2015 and continue to do so. Constructed in October 2014, the ditch has yet to be revegetated or stabilized. The few places where it has its original dimensions or any vegetation is where neighboring property owners manually re-excavated or seeded the ditch themselves.

If you're not aware, the Borough administration in 2014 contracted with the very same firm that originally engineered the problematic mile-long eastern extension of Buoy Avenue in 2005. Then incredibly, the roadside ditches along the higher extension dead-ended at the lower original road which lacked roadside ditches all together. The firm's engineers assumed all SWR from the upper end would percolate before it reached the ditch-less lower end. They grossly miscalculated. Nonetheless, Borough RSA engineers at the time readily accepted the new road extension despite its evident flaws.

So I suppose no bad deed goes unrewarded since the very same firm that improperly engineered Buoy Avenue in 2005 was given a no-bid contract in 2014 to finally get it right. And guess what? They didn't as the very same failed and illegal practice of percolating SWR rather than conveying it to an outfall was again employed.

I know the sordid details of this story intimately as the offending old and new ditches have had very regrettable consequences for my family and me. Buoy Avenue's ditches have flooded my Buoy Avenue residential parcel every spring since 2005 as well as the falls of 2006, 2012, 2013, 2014, and 2015. Remarkably, the Borough has been flooding my parcel for ten years now and has not once offered me Borough owned waterfront real estate, nor the monetary equivalent, in compensation. I must not be well connected?

Of course Buoy Avenue is just one road among many in the K-Beach area where the Borough illegally leaches SWR rather than conveying it to outfalls. But Buoy and Trawling residents are fortunate compared to residents on other K-Beach roads as once SWR has completely saturated our roadside properties via its roadside ditches, excess waters can then potentially reach Cook Inlet by way of the Dogfish culvert once the various engineered impediments have been overcome. In contrast, SWR on every road between Buoy and Chine has absolutely no hope of reaching nearby water bodies, they are all hopelessly blocked by the dam known as K-Beach Road. Their lamentable residents are left to drown in their own SWR.

The Borough administration's position is clear, SWR be dammed and residents be damned! So do not speak to K-Beach area residents about the Borough's good faith efforts to prevent or mitigate future flooding - the argument holds no water... or should we say it conveys no SWR! Now will someone please explain to me how acquiring an easement for the purpose of flooding the Keohane's already flooded basin and liquidating the most promising Borough owned water front parcel reserved and dedicated for area drainage is going to help K-Beach residents prevent another flood?

*** In common law "quid pro quo" indicates that an item or a service has been traded in return for something of value, usually when the propriety or equity of the transaction is in question.**

In summary the ordinance should be opposed because:

I. Percolating or leaching SWR into areas that have high ground water problems is untenable and morally repugnant. It also violates Borough law - municipal code 14.06.170.

II. Liquidating Borough owned property expressly and entirely dedicated to area drainage will thwart future drainage efforts. It may also violate the federal patent established on the parcel in 1965.

III. The proposed transaction is grossly inequitable - valuable public land, or the monetary equivalent, in exchange for the very minor service of allowing a private frog pond to be flooded in 2013? And most importantly, it completely fails to address the real problem - how best to permanently improve SWR drainage in the K-Beach area.

Sincerely,

Toby Burke

K-Beach Resident