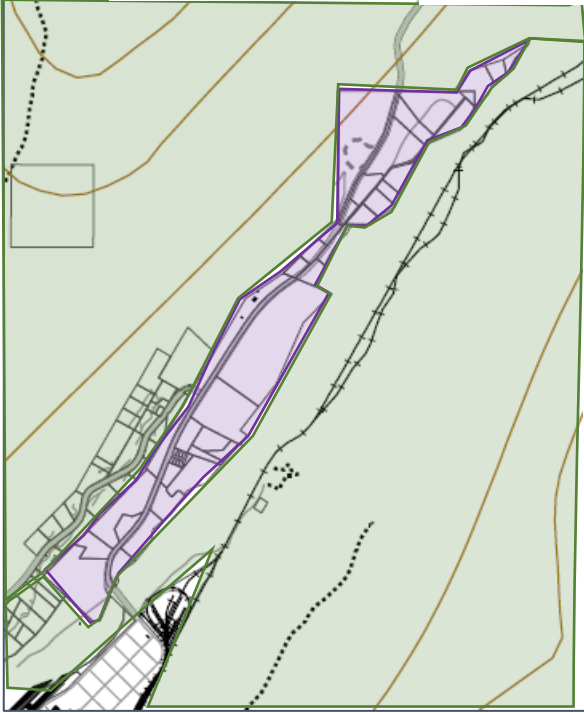
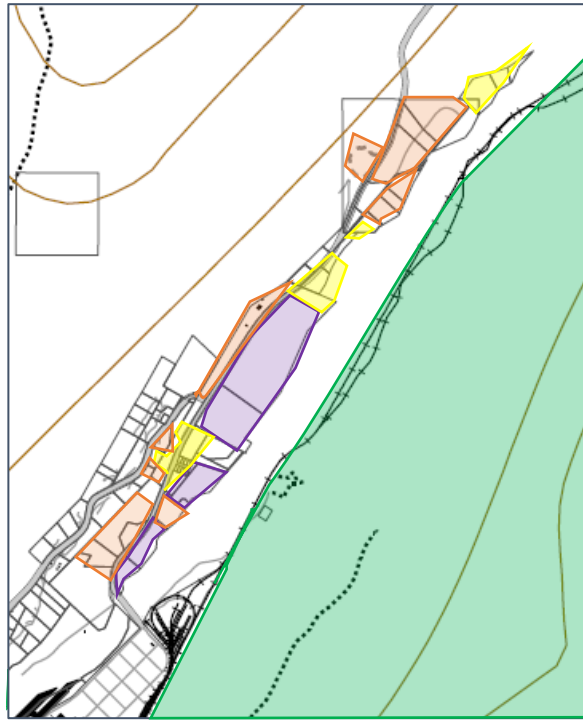


FUTURE GROWTH DESIGNATION		PURPOSE	ZONING EXPECTED HERE
Industrial	Encourage land uses and activities that are of an industrial nature. Industrial uses include manufacturing, processing, repairing and assembling goods. Because of noise, odors, waste and other impacts inherent in industrial activity, performance standards are applied. The zoning code makes a distinction between Industrial Light activities and Industrial activities.		Industrial Industrial Light
Waterfront Commercial-Industrial	Encourage land uses and activities that are water-dependent, water-related or of a water-enjoyment nature. Priority should be for developments that directly depend on the water, a waterfront location, or both. Activities can be of an industrial or commercial nature.		Waterfront
Commercial	Encourage land uses and activities that are commercial in nature. Commercial uses include retail, the sale of goods and services, offices, and businesses.		Business General Business Historic
Residential	Encourage development of a healthy, safe and pleasant environment for residential living.		Residential General
Residential Low Density	Encourage development of a healthy, safe and pleasant environment for large lot residential living (one single family or duplex home per acre).		Residential Low Density Residential Conservation
Residential Transition Area	Encourage a greater variety of housing and more flexible lot layout here, especially on 1/2 acre (about 4 townsite lots) or larger parcels. Goal is to encourage planned, multi-unit, housing developments that feature a mix of condominiums, apartments, townhouses, shared wall dwelling units, single family homes that are often cottage style and smaller than is common. Flexibility in density, minimum lot requirements, setbacks, and lot coverage is expected in exchange for clustered, cohesive multi-unit development that recognizes pedestrian connectivity and shared common space. To accomplish this in a predictable and orderly manner, the zoning code will likely be updated.		TBD Applies to all zoning within the Residential Transition Area Zoning Overlay Likely new sections of Zoning Code, such as a PUD, to set consistent rules
Recreation Reserve	This is undeveloped land that is either in public ownership or private rural land with recreation use and value. Recreation cabins, lodges, hiking trails, permitted commercial tours, seasonal recreational facilities, firewood gathering, and low-density housing are typically allowed here. Manage land here for conservation of natural resources, fish, wildlife, scenery and views.		Residential Conservation This zoning district is intended to provide an area for low-density residential development on adequate lot sizes not served by municipal water and sewer, to allow natural resource development and conservation, and to allow dispersed recreational activities including recreational cabins, lodges, and small seasonal recreational facilities.
Recreation, Open Space, Park	This is land with high recreation values. Some land will be left as undeveloped open space while other land will be actively managed to promote dispersed and more intensive recreation use, including visitor-related activities.		
Resource Reserve	This is undeveloped land managed for a balance of conservation and development of natural resources, for future low density dispersed housing, and community growth. Resource Reserve allows a variety of dispersed well-designed uses, including housing, recreation, firewood harvest, high-grade (select) commercial timber harvest, rural road development, mineral extraction, hunting and helicopter landing, etcetera. Any uses proposed for land adjacent to or within viewshed of Chilkoot Trail must take the use of the park unit into consideration, including avoiding or minimizing impacts to its recreational and historic use. Impacts to wildlife populations in the area must be avoided or minimized.		
Hydroelectric/ Recreation	This is land that is now, or could in the future, be used for hydroelectric generation. This designation is coupled with recreation because the goal is to dually provide access to alpine areas for recreation use in conjunction with hydroelectric access and development. These uses can be compatible, as they are at Dewey Lake in Skagway.		Criteria for lands that are included in this zoning district are those that are relatively isolated from denser development due to natural features and the lay-of-the-land, and that are presently without any or all of the following: municipal water, municipal sewer, roads up to standard.

- Residential Conservation Zoning
- Industrial Zoning

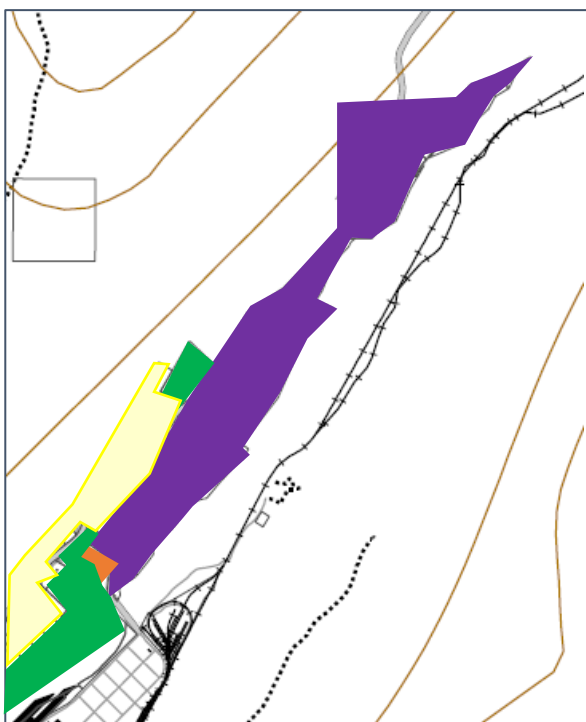


Existing Zoning

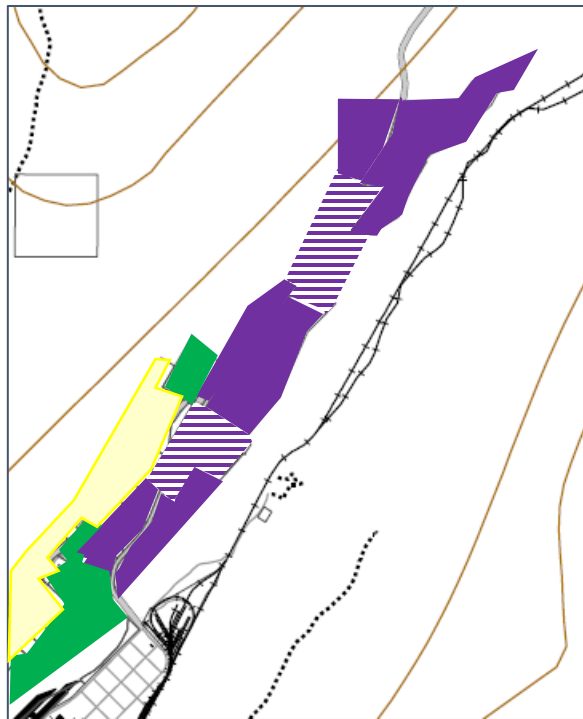


Existing Land Use

- Industrial
- Commercial
- Recreation, Open Space, Park
- Residential

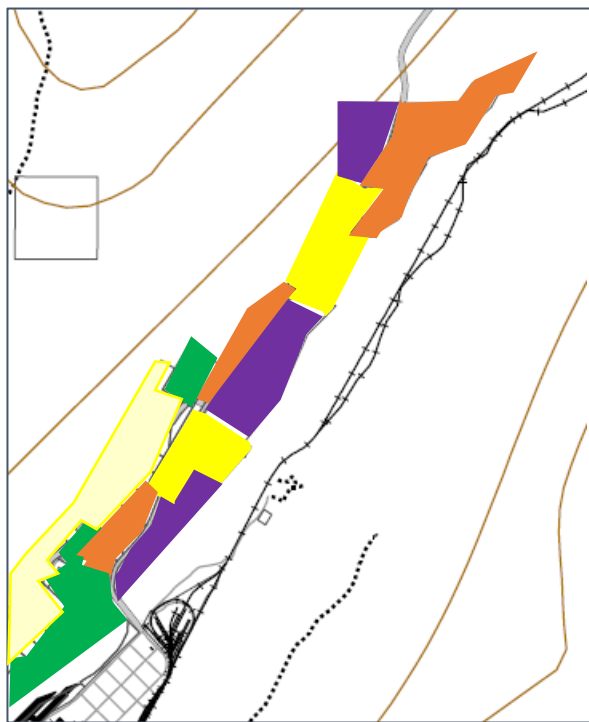


2020 (Current) Future Growth Map

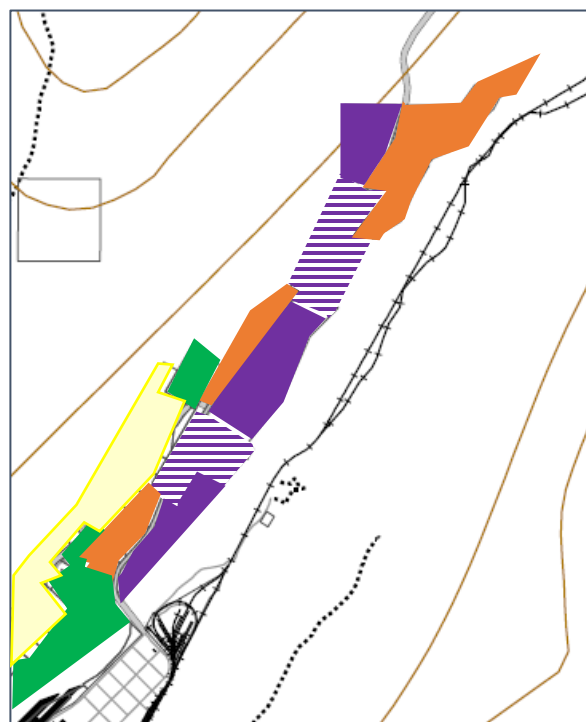


2030 Future Growth Map Option A

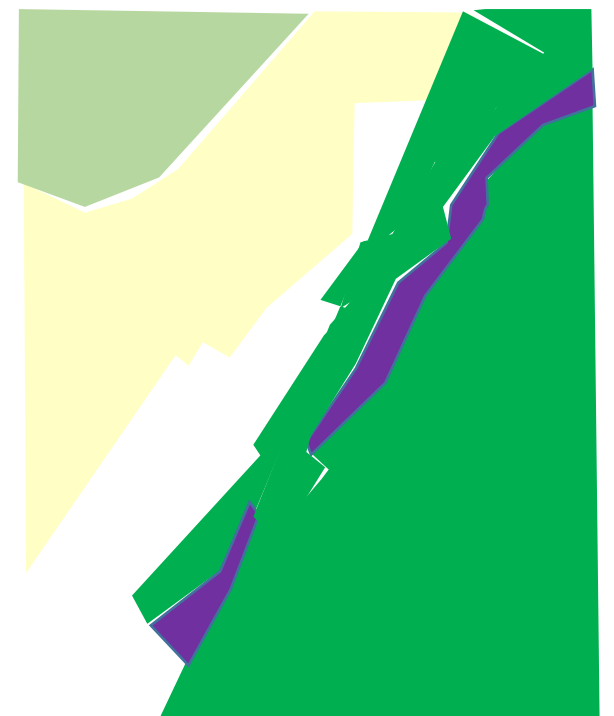
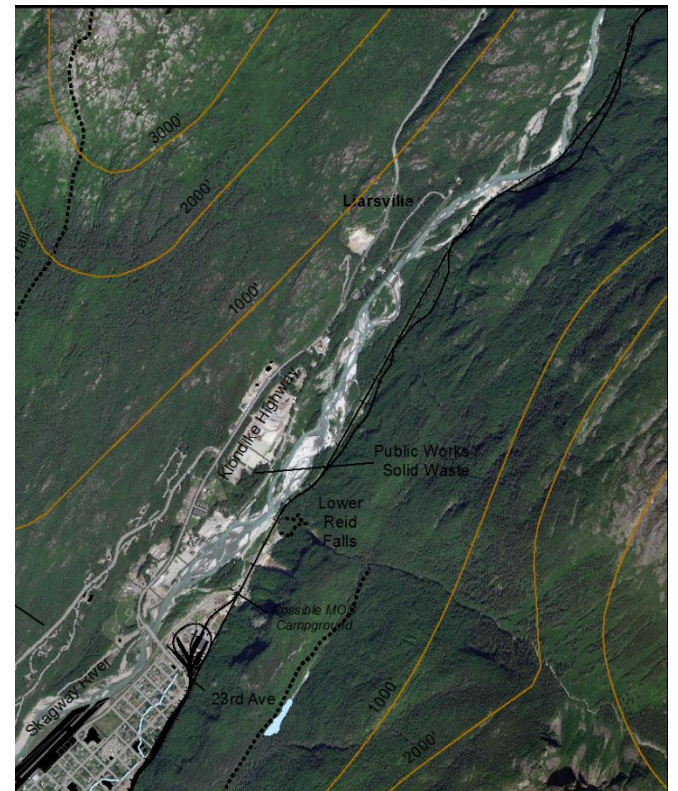
- Residential
- Residential Low Density
- Commercial
- Industrial
- Recreation, Open Space, Park
- Residential Transition Area



2030 Future Growth Map Option B



2030 Future Growth Map Option C



IGNORE THIS (-:

FUTURE GROWTH MAPS (and words)

Purpose

- BIG PICTURE, LONG TERM DIRECTION
- Not what Conditional Use permit are we approving here next year? Instead, it's how do we want Skagway to grown, develop, and look like in 10-20 years.
- Not zoning, but is does give direction for future zoning.

	WHAT	PROS	CONS
Keep Current		No change, and change can be uncomfortable.	<p>Sends message that for entire area industrial development is primary desired land use and growth here, and that zoning is expected to be industrial or industrial light.</p> <p>Does not encourage residential development in area</p> <p>This is not what is expected or desired.</p>
Option A	<p>All industrial, but with residential transition area overlay</p> <p>Removes commercial over Jewell, no sense singling that property out when commercial use in area is in many places.</p>	<p>Relatively simple</p> <p>Encourages desired type of residential development in designated areas. (Need to update zoning code)</p>	<p>Doesn't recognize existing commercial and tourism uses.</p> <p>Sends message that industrial development is primary desired and expected land use and growth in all areas except Residential Overlay</p>
Option B	Mixture of industrial, commercial, and residential	<p>Reflects current land use and expected future growth</p> <p>Sets stage for future mix of commercial, industrial, and residential growth.</p>	Does not set the stage for the desired type of planned multi-unit, flexible residential development
Option C	Like Option B, but uses Residential Transition Area rather than Residential	<p>Reflects current land use and expected future growth</p> <p>Sets stage for future mix of commercial, industrial, and residential growth.</p> <p>Encourages desired type of residential development in designated areas. (Need to update zoning code)</p>	

Sheinberg recommends either Option C or A

Housing Goal

Increase housing in Skagway that meets local budgets and lifestyle preferences, which often are linked to phases of life.

Housing Objective (1 of 8)

Achieve municipal goal to see construction of at least 125 new dwelling units (not including replacement stock of 80 dwelling units at Garden City) by 2030. New housing should be a mix of housing styles.

DESIRE: Build More Small Dwelling Units (small homes, condos, apartments, tiny homes)

Skagway residents have been outspoken in wanting to see more housing variety and types, many of which often cost less than a larger single-family house on a single lot.

Specifically, there is interest in more condominiums, apartments, smaller single family homes or townhouses clustered around a common space (cottage housing), live-work units (office or large garage below and condo/apartment above), as well as developments with a mix of tiny homes-single-family-duplex-multi-family units that are part of a planned development.

Skagway’s zoning code needs a significant update to help pave-the-way to accomplish this. The Future Growth Maps in the Land Use chapter show Residential Transition Areas where these types of housing developments may especially be appropriate.

FUTURE GROWTH MAP - Residential Transition Area

- Encourage a greater variety of housing and more flexible lot layout here, especially on 1/2 acre (about 4 townsite lots) or larger parcels.
- Goal is to encourage planned, multi-unit, housing developments that feature a mix of condominiums, apartments, townhouses, shared wall dwelling units, single family homes that are often cottage style and smaller than is common.
- Flexibility in density, minimum lot requirements, setbacks, and lot coverage is expected in exchange for clustered, cohesive multi-unit development that recognizes pedestrian connectivity and shared common space.
- To accomplish this in a predictable and orderly manner, the zoning code will likely be updated.

SOME OPTIONS TO ENABLE VIA ZONING CODE	PRO	CON
Add more types of R uses to IL and I zoning, allow MH Parks N of 15 th in BG, IL, and I	<ul style="list-style-type: none"> • Familiar • Anything can be anywhere 	<ul style="list-style-type: none"> • Does <u>not</u> set the stage for the desired type of planned multi-unit, flexible residential development • Anything can be anywhere
Create a Residential Transition Overlay Zone where shown on Future Growth Maps. Add section(s) to Zoning Code to set up intent and rules, bonuses	<ul style="list-style-type: none"> • <u>Does</u> set the stage for the desired type of planned multi-unit, flexible residential development 	<ul style="list-style-type: none"> • New to Skagway • Will take some time to accomplish zoning changes
Establish Residential-Multi Family Zoning District	<ul style="list-style-type: none"> • Familiar 	<ul style="list-style-type: none"> • Does <u>not</u> set the stage for the desired type of planned multi-unit, flexible residential development



new MOS Trail, estb 2019

Solve trail connection to complete River "Loop"

From Yakutania footbridge trail on improved landscaped path to 1st & Main, then along new bike lane/widened sidewalk along Main to 15th, then crosses on S end of school to crosswalk to dike segment of trail

Google Earth

Image © 2019 CNES / Airbus

2000 ft



Erickson Cottage Housing on Bainbridge Island, WA.

Eleven 1100 sf single-family homes clustered around a commonly owned lawn on a 1-acre site (this would be 8 Skagway 5,000 sf lots). Owners are in a condominium association where each 'condo' is a single family home and the land under it. The Homeowners Association keeps up the commonly owned lawn, community building, home exteriors, parking areas, etc. At a 2019 Comp Plan work session residents reacted very favorably to this type of housing option for Skagway.



Current Status, Challenges and Opportunities

Air, Land, and Water Quality

Challenges and Opportunities
Maintain air, land, and water quality. Designate wellhead and watershed protection areas to protect drinking water source(s).

Coastal habitats in the MOS are described in the [Skagway Coastal Management Plan](#) (SCMP) in Chapter 3. Though a bit dated, the SCMP map of anadromous fish, wetlands, and amphibian use areas is found in the chapter’s addendum.

A clean environment is important to Skagway residents. There were three times during the Comp Plan development that residents could list things important to their quality of life in Skagway. Twenty responses (out of 288 total) were specifically about the value of local clean air and water. Generally, local air, water, and land quality is excellent with only a few site-specific concerns.

Air Quality

Skagway is located in a Class II airshed, as classified under provisions of the Clean Air Act amendments. Class II airsheds are defined by the Alaska Department of Environmental Conservation (DEC) as generally free from air pollution, but with some industrial use occurring. Potential sources of air pollutant include emissions from cruise ships, diesel burning trains, and busses, the incinerator, and other transshipment activities. Skagway is quite windy, which supports good air quality. However, during periods when it is calm and there is air stagnation, or when there are overnight temperature inversions, pollutants can stack against the mountains and hover at elevations linked to air temperature. This can lead to temporary impacts to air quality and visibility. This is particularly a concern in the summer when cruise ships, tour busses and the train are all operating. If it is a dry spell, conditions can get quite dusty as well.

In response to these types of concerns, DEC took 48 air opacity readings during the 2016 cruise season (between the beginning of May and end of September)¹. Norwegian Cruise lines committed to monitoring air quality in 2020. While this is excellent, a more comprehensive air quality program that monitors air emissions from all potential sources would provide a comprehensive baseline assessment of existing air quality conditions.

Water Quality

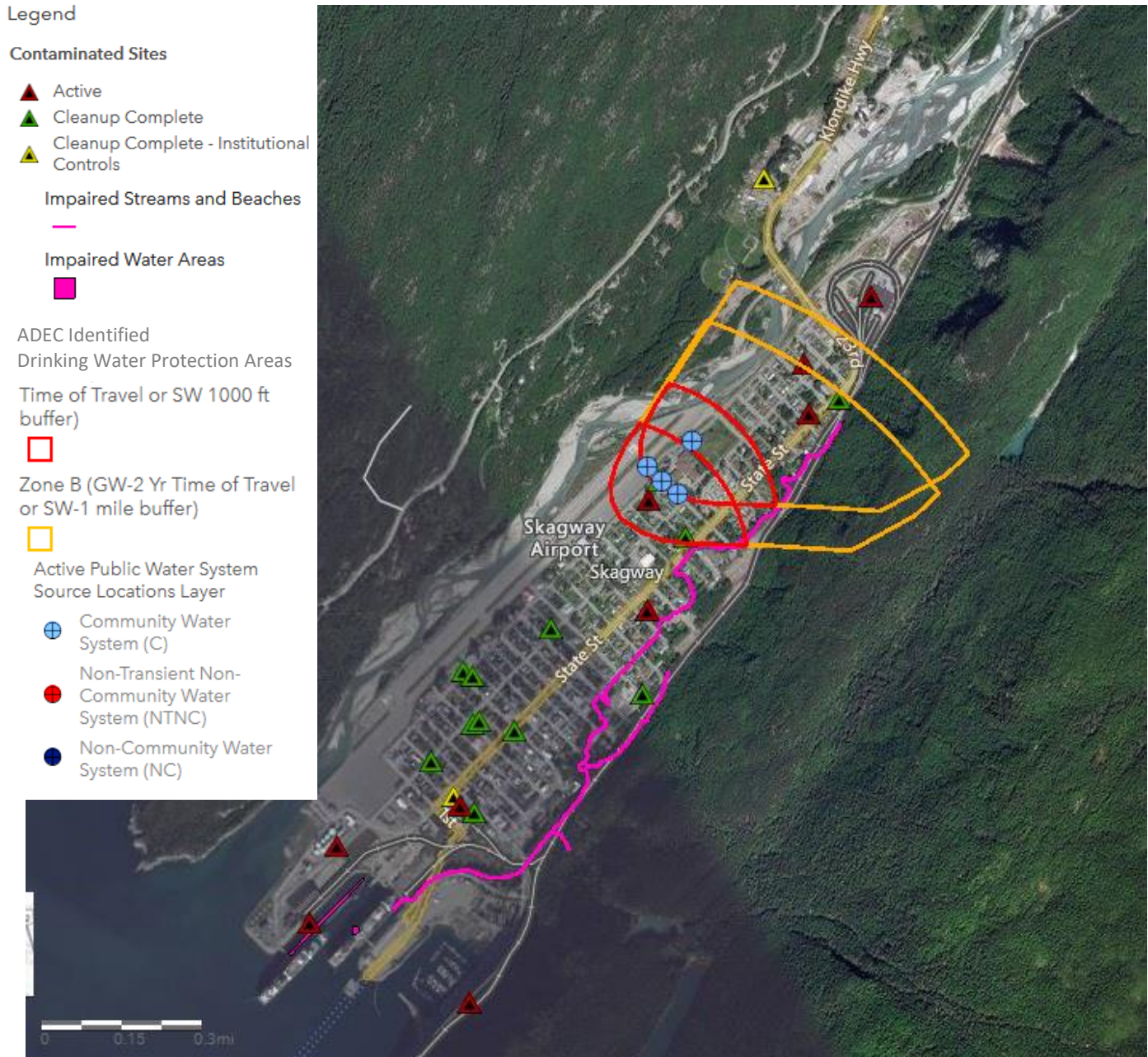
Surface water in the Skagway area is generally clear with some suspended sediments during periods of high run-off (NPS, 1997). Stormwater pollution prevention is important in Skagway to protect drinking water quality (source is an aquifer beneath the Skagway River), to protect salmon and their habitat (Pullen Creek), and to maintain a clean and attractive environment for both residents and visitors.

¹ Moffatt & Nichol, Environmental and Regulatory Compliance- Final Report, Port of Skagway, July 2017

Pullen Creek and Skagway harbor are on DEC's 303(d) list of impaired water bodies in Alaska for heavy metals contamination. Pullen creek provides rearing habitat for coho and Dolly Varden and spawning habitat for coho, pink, and chum salmon. The Skagway Traditional Council prepared a Pullen Creek assessment in 2005 and a waterbody recovery plan in 2006. The Taiya Inlet watershed Council prepared a 2006 [Pullen Creek Action Plan](#), which describes current conditions, problems, solutions, and management and restoration recommendations. In 2010, DEC looked at Total Maximum Daily Load (TMDL) for metals in Pullen creek. A TMDL is the amount of a pollutant the waterbody can receive while maintaining compliance with applicable water quality standards. The DEC TMDL study recommends natural processes operating over time as the best course of action to achieve the desired results. Implementation should also include practices to maintain stable streambanks and minimize the potential for disturbance, erosion, and delivery of contaminated upland and streambank soils. The Southeast Alaska Watershed Council recommends using responsible development practices including setbacks near salmon streams, and community stewardship to reduce impacts to fish (pollution, garbage, lawn care, etc.). Accomplishing Phase II of the Pullen Creek Streamwalk to City Hall, including work with private property owners, is an opportunity to accomplish more Pullen Creek restoration efforts.

Figure X-X on the next page is from the ADEC records. It shows Skagway's well head protection zones and the nine active places (red triangles) on the State's contaminated site database (ADEC 2017).

Figure X-x



Sources: Alaska Department of Environmental Conservation Contaminated Sites Program and Drinking Water Program²

² <https://dec.alaska.gov/eh/dw/dwp/protection-areas-map/>
<https://www.arcgis.com/home/webmap/viewer.html?webmap=315240bf84aa0b8272ad1cef3cad3>

Nine Active Contaminated Sites Reports, from North to South

(Active sites are depicted with red triangles on Figure X-X)

Source data: Alaska Department of Environmental Conservation Contaminated Sites Program and Drinking Water Program, personal communications with ADEC's J. Barris and E. Gleason, November 2019

1	White Pass & Yukon Railroad Yard	
Address	NE of 23rd Avenue Bridge, at Terminus of State St	
Information	<p>The White Pass rail yard operated as a locomotive and maintenance yard since the early 1990s. The site was leased to the military during World War II. The railway closed between 1982 and 1988. Since 1988 it has been used on a seasonal basis as a tourist passenger rail service. Environmental investigations at the site began in 1987. Sources of contamination at the site are petroleum spills and a treated wood chip pile. Twenty two wells were installed on the railyard property and adjacent Alaska street property to delineate the extent of groundwater contamination. Since monitoring work began, several monitoring wells have been removed from the biannual and now annual program. At present six source area wells are being monitored for contamination. The site is located 2,300 feet horizontal up river and up gradient of the Skagway drinking water municipal wells, which is beyond the two year capture zone for the source aquifer</p>	
Latest Status		
4/11/2019	Meeting or Teleconference Held	Teleconference with ADEC, Golder, and WP&YR today to discuss the 2018 report and upcoming 2019 sampling. Golder provided information in a 3/20/2019 email and 2018 report showing that PCE has no seasonal variation. ADEC approves annual sampling for the site. PCP was detected in 2018, as such all active wells will be sampled for PCP in 2019.
4/26/2019	Site Characterization Report Appr.	Received revised report from Golder on 4/26/2019. ADEC has reviewed the report and it is now approved. Six monitoring wells were sampled in spring 2018. Of the wells sampled, only one well (the well adjacent to the shop) is above ADEC groundwater cleanup levels. The well is above cleanup levels for perchloroethylene, diesel range organics, residual range organics, and pentachlorophenol. All other monitoring wells below groundwater cleanup levels. Groundwater monitoring will continue until the contaminant concentrations are below cleanup levels or have reached a steady state. White Pass reviewed their files and confirmed that the aqueous fire-fighting foams have never been used or stored on the site
2	Temsco Helicopters Employee Housing Skagway	
Address	North of Intersection of 21st Avenue and Main Street	
Information	<p>On September 29, 2018 a release of diesel fuel was reported in the vicinity of three aboveground heating oil tanks at the Temsco Helicopters Employee Housing units in Skagway. It was later determined that an undetermined amount of diesel had been released to the ground due to a cracked coupling on one of the buried copper fuel lines connected to the three heating oil tanks. PVC pipe around the fuel line acted as a conduit and channeled the fuel to both ends of the pipe. Excavation and sampling was conducted in November, 2018. Approximately 45 cubic yards of contaminated soil were removed. Diesel range organics remain in soil above DEC cleanup levels. A work plan is currently being developed to further characterize the extent of contamination onsite.</p>	

Latest Status		
10/25/2019	Report or Workplan Review - Other	ADEC commented on September 25, 2019 Work Plan for Site Characterization, Temsco Employee Housing. Work plan proposes to install three groundwater monitoring wells and sample for petroleum related contaminants. The work plan does not address data gaps in horizontal soil characterization.

3	Skagway State Street Mystery	
Address	20th and State Streets, Between Blocks 23 and 20	
Information	In November 1998, diesel was encountered at the vacant lot, at the intersection of 20th and State Street. Product appeared to be initially flowing onto the property from the Alaska Department of Transportation (DOT) right-of-way. However, characterization work in 2004 indicated that the contaminant source was on-site. As of September 2018, the site has not been fully characterized nor cleaned up to regulatory standards despite DEC effort. A Notice of Environmental Contamination was placed on the property deed in February of 2015 and will remain in place until clean up actions have been completed and the site is officially closed.	

Latest Status		
8/6/2018	Site Characterization Report Appr.	Three test pits dug on site where historic data indicated the presence of petroleum soil contamination. Oily sheens but no free product was observed on the groundwater surface. The contaminated horizon appeared at the approximate same depth (5.5 to 6 ft. belowground) for each test pit. Results found no chlorinated compounds, but petroleum contamination above ADEC cleanup levels is present. Contamination appears to be at site of former cabin.
9/5/2019	Update or Other Action	Per the responsible party's attorney a response letter for last year's site work is in the works. No cleanup up. Site is progressing slowly. Hope for further work in the future.

4	Residence - 1410 Alaska Street	
Address	1410 Alaska Street	
Information	On September 7, 2016, petroleum-impacted soil was encountered during maintenance on a buried waterline in the right-of-way adjacent to the residential property at 1410 Alaska Street. The source of the contamination was unknown. Diesel range organics, gasoline range organics, 1,2,4-trimethylbenzene, 1,1,2,2-tetrachloroethane, 1-methylnaphthalene, and 2-methylnaphthalene were confirmed in subsurface soil above DEC cleanup levels. Excavated soil from the property was segregated and stored. There are several drinking water wells within ~200 to 300 feet of the contamination.	
Latest Status		
6/29/2017	Site Characterization Workplan Approved	Approved work plan outlines activities to conduct additional sampling of the City-owned right-of-way adjacent to the Residence - 1410 Alaska Street contaminated site where contamination was found on the southern corner of the property. A Geoprobe truck mounted drill will be used to complete 5 borings. Borings 1-3 will be made on 14th Avenue in front of the Jennings Property and borings 4-5 will be made in the middle of 14th Avenue. Soil core samples will be collected from depths previously found to have contamination: 6-9 feet below ground surface. A soil sample representing the highest level of contamination will be selected from each core based on visual and olfactory cues. A total of 5 primary analytical samples will be analyzed for

		DRO, GRO, RRO, volatile organic compounds (VOCs), semivolatile organics (SVOCs), polycyclic aromatic hydrocarbons (PAHs), and metals.
7/12/2017	Site Visit	Site visit while the consultant collected samples from the roadway. Some signs of petroleum contamination were noted as were pieces of wood stave.
11/13/2017	Update or Other Action	Approved backfilling of the City-owned trench for winter.
6/29/2017		<p>A work plan is being developed for the 2020 season.</p> <p>The report on work completed in 2016 documents the results of site investigation activities conducted for the MOS around the MOS-owned perimeter of the 1410 Alaska Street Contaminated Site first discovered in September 2016. Contamination is present both on the property, the roadway, and the right-of-way. The contaminants of concern at this site that were found in concentrations greater than or approaching ADEC cleanup levels are diesel range organics (DRO), gasoline range organics (GRO), chlorobenzene, ethylbenzene, xylenes, n-propylbenzene, 4-chlorotoluene, 1,2,4-trimethylbenzene, naphthalene, 1,3,5-trimethylbenzene, 1-methylnaphthalene, 2-methylnaphthalene, 2-chlorotoluene, and 1,1,2,2-tetrachloroethane. Five boreholes were advanced in 14th Street adjacent to where contamination was previously located. The purpose of the investigation was to determine if chlorinated solvents were present below the street. Consistent with previous results, the values were between the migration to groundwater and human health cleanup values. The Volatile Organic Compound results were unusable because samples were received by the laboratory at a temperature above what is allowed, therefore no conclusions regarding the presence or absence of VOC within the roadway could be made. Contamination above ADEC cleanup levels exists beneath and adjacent to the MOS-owned roadway. When the contamination is accessible, it must be characterized and the site must meet the most stringent of 18 AAC 75 cleanup levels.</p>

5	Skagway Former Medical Clinic	
Address	310 11th Avenue	
Information	In November 2017, petroleum-contaminated soil was discovered during geotechnical activities at the former location of the Dahl Memorial Clinic. The property was being evaluated for potential new construction when diesel range organics and naphthalene were confirmed in soil above DEC cleanup levels for migration to groundwater but below human health cleanup levels. The City of Skagway plans to characterize the contamination in preparation for development of the property in the future.	
Latest Status		
4/5/2019	Site Characterization Workplan Approved	The objective is to install seven groundwater monitoring wells using a GeoProbe. The wells will be placed on each of the four sides of the property and within the alleyway north of the property. Groundwater samples will be collected from each well. Soil and groundwater samples will be analyzed for GRO, DRO, volatile organic compounds (VOCs), and polycyclic aromatic hydrocarbons (PAHs).

6	Residence - 363 2nd Avenue	
Address	363 2nd Avenue	
Information	In April, 2014 a cracked fitting was discovered on a fuel line between two aboveground heating oil tanks at 363 2nd Avenue. An unknown amount of diesel fuel had been released to the surface at the time of discovery. The fuel line was subsequently repaired, and prior to initial remediation the aboveground storage tanks (ASTs) were removed. In October 2014 approximately 200-cubic yards of contaminated soil was removed from the site and transported to Seattle for disposal. Excavation activities were limited due to the building foundation and presence of the groundwater table. Sample analysis confirmed soil contamination remains above DEC cleanup levels and due to remaining contamination at the soil-groundwater interface, groundwater contamination may also be present but has not been evaluated.	
Latest Status		
6/21/2018	Workplan Requested	Due to the remaining contamination and the risk of vapor intrusion into the building, which houses both a business and rental suites, and the observed groundwater contamination, the ADEC is requesting a work plan to delineate the extent of groundwater contamination and the potential for vapor intrusion.
11/6/2018	Site Characterization Workplan Appr.	Approved a Groundwater Monitoring and 2018 Work Plan. Further site characterization activities include soil sampling, groundwater sampling, and indoor air sampling

7	Petro Marine Skagway Truck Rack	
Address	10 Beach Road, near Ore Terminal off State St	
Information	Fifteen cubic yards of impacted surface soil recovered at 265-gallon diesel spill. Later, additional soil was excavated. Now, 175 cubic yards is stockpiled on-site in a biocell.	
Latest Status		
11/3/2017	Report or Workplan Review - Other	Reviewed the Sampling and Analysis Plan. Proposed activities consist of collecting soil samples from the onsite biocell. Based on field screening results, select soil samples will be submitted for analysis of contaminants.
7/3/2018	Meeting or Teleconference Held	Petro Marine representative states that the biocell soils are being turned 1-2 times per month, and implementation of the Sampling and Analysis Plan will occur fall 2018.
8	Skagway (Nahku) Ore Terminal	
Address	State Street South at Skagway Harbor Loading Facility (shore-based marine transfer to ship transport; large ocean vessels)	
Information	The release of lead and zinc ore concentrate fugitive dust to upland properties and to harbor sediments of the marine environment from historical ore transfer operations (1970s, 1980s) is confirmed by site investigation. Site cleanup in Skagway by responsible party Pacific and Arctic Railway and Navigation Company and other responsible parties has reduced the risk of human exposure on the upland properties. However, contaminated sediments in the Ore Basin of the Skagway Harbor remain a major concern to DEC. DEC has requested a thorough seafood risk assessment be conducted if a planned sediment dredge removal action cleanup remedy is not implemented in the near future.	
Latest Status		
9/18/2019	Report or Workplan	ADEC provides comments on the document titled "Remedial Action Options Analysis- DRAFT" dated August 2019. The preferred alternative is dredging in front of the loader area.

	Review - Other	
10/14/2019	Update or Other Action	ADEC approves the updated document titled Remedial Action Options Analysis, dated October 2019. ADEC is in support of the general approach and selected remedial option outlined (dredging of ~85% mass of accessible contamination).

9	Skagway Wharf Tanks Area	
Address	Skagway Boat Harbor	
Information	<p>Directly upland from the Skagway Small Boat Harbor is the Wharf Tanks Area located in Klondike National Park. WP&YR has owned this property since about 1898. Eleven aboveground storage tanks (ASTs) were built in 1942. The last of the ASTs were removed in 1996. Due to historical activities on site, there is both a residual light non-aqueous phase liquid (LNAPL) zone and a large thick zone of residual LNAPL smeared across the interval of soil corresponding to the water table fluctuations. In the mid-1970s a large rock-fall punctured a recently added AST releasing 0.5 million gallons of gasoline. Investigations of soil and groundwater contamination occurred in November 2000 and June 2002. The June 2002 average levels of gasoline range hydrocarbons (GRO), diesel range hydrocarbons (DRO) and benzene in groundwater exceeded ADEC cleanup levels by a factor of two, four, and four respectively.</p> <p>In 2004, the upland road and surface area was expanded toward the boat harbor where a sheet pile retaining wall was installed. Golder has installed a system of subsurface wells over the length of the former AST area and a network of subsurface piping to pump air into and pull fuel vapors back out of the hydrocarbon smear zone. When fuel appears in groundwater wells it is recovered by pumping until the well is cleared. Active recovery of fuel and vapors from the subsurface continues on a seasonal basis and sample monitoring of groundwater contamination takes place on a less frequent schedule.</p>	
Latest Status		
7/10/2019	Site Characterization Report Appr.	ADEC approves the "Results of the 2017 Groundwater Monitoring Program, ADEC File Number 1526.38.009, White Pass & Yukon Route, Former Wharf Tanks Site, Skagway, Alaska"
7/23/2019	Report or Workplan Review - Other	ADEC provides comment on "Results of the 2018 Groundwater Monitoring Program, ADEC File Number 1526.38.009, White Pass & Yukon Route Former Wharf Tanks Site, Skagway, Alaska". Overall, groundwater concentrations are decreasing since monitoring began, but DRO and RRO in some wells appear to be more recently increasing. Benzene, ethylbenzene, xylene, GRO, DRO, and RRO remain above cleanup levels in one or more wells each.