

Staff

Interview

Summary





Kirkland Surface Water Master Plan

City Stakeholder Interview Summary

Interview Purpose

City of Kirkland stakeholders were interviewed in July 2021 and October 2021 to gain an understanding of how surface and stormwater management functions are carried out in different groups within the organization and to identify potential capital and/or programmatic (i.e., policy, operational, staffing, or equipment needs) actions that should be put forth for consideration in the Surface Water Master Plan. Representatives of departments that intersect with surface and stormwater management elements and staff that work within the surface water management engineering and operations groups were interviewed. A brief electronic survey was delivered to the interview participants in advance of their virtual interviews to facilitate discussion and elicit critical thinking about their surface and stormwater responsibilities and to obtain basic information about the interview participants. Eight out of the ten participants completed the survey in advance of the interviews. The interviews were confidential, and no individual participants are called out by group or other identifying feature in this document. The interviews were conducted early in the planning process (summer – fall 2021). Current programs and processes may have already adapted to support more efficient implementation identified in this document.

Overview and Participation

Interviewers:

Heather Haskell, EMA
Erin Nelson, Altaterra Consulting

Interview Participants (12):

- Rod Steitzer, *CIP Manager*
- Lee Winston, *O&M Stormwater Lead*
- Jeremy McMahan, *Deputy Planning Director*
- Nick Beldean, *Grounds Crew Lead*
- Jason Osborn, *Stormwater Maintenance Supervisor*
- Jenny Gaus, *Strategic Advisor*
- Ryeann-Marie Tuomisto, *Water Quality Program Coordinator*
- Tuan Phan, *Supervisor Development Engineering*
- Joel Pfundt, *Transportation Mgr.*
- Mary Gardocki, *Parks and Community Services Mgr.*
- Kelli Jones, *Surface Water Program Supervisor*
- Rachel Konrady, *Surface Water Planner*

Representative Group/Functions of Interviewees:

Figure 1 shows the Departments, and Groups represented by individuals interviewed and the number of individuals within the groups that were interviewed. Divisions, Sections, and Groups not represented in the interviews are not shown in Figure 1.

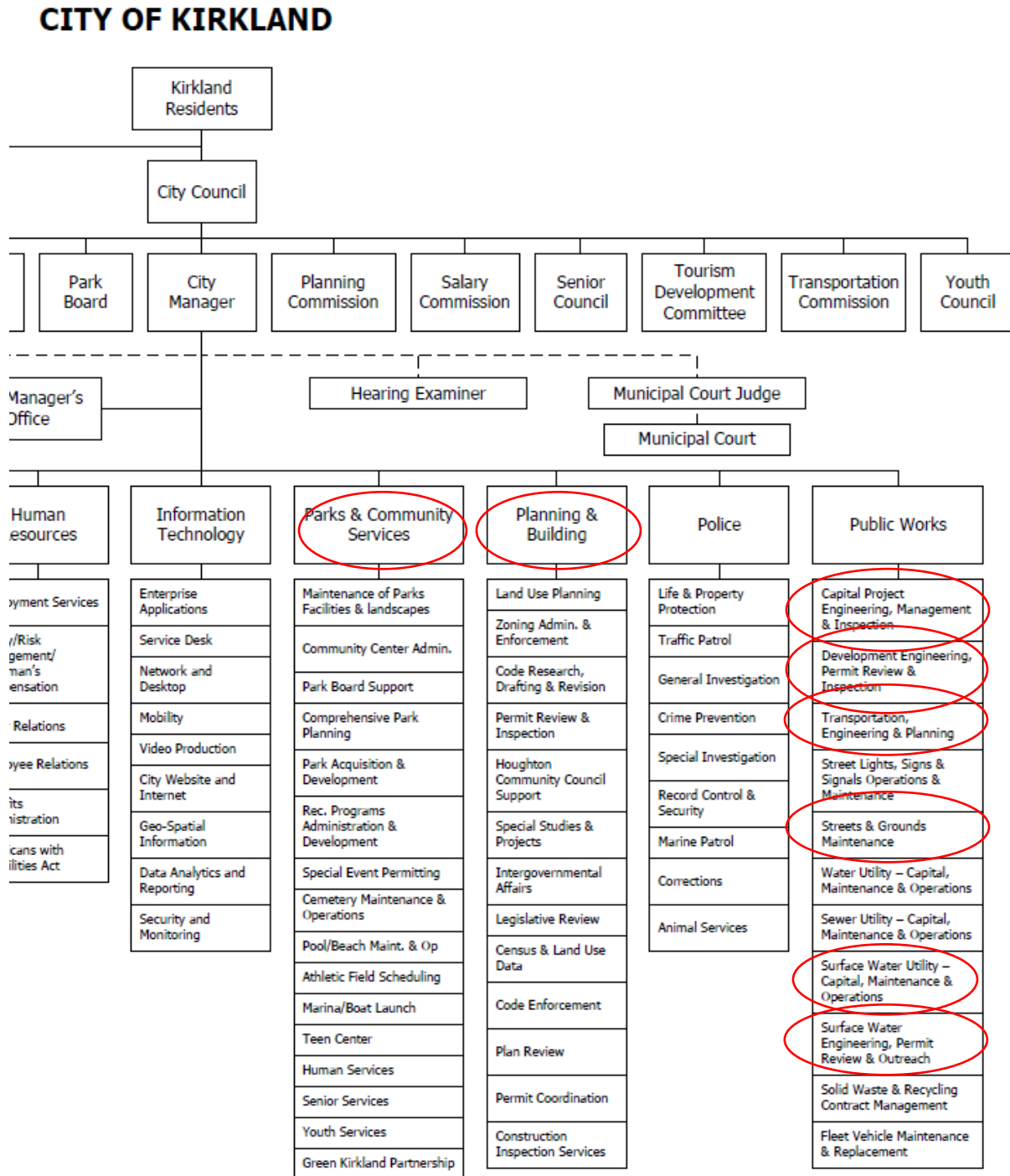


Figure 1. Location in Organization where Interviewees currently work

Representative Kirkland Experience of Interviewees:

Figure 2 shows the number of years of Kirkland experience represented by the personnel interviewed for the Kirkland Surface Water Master Plan. Over half of the people interviewed have been with the city over 10 years and four have over 20 years of experience. Two people interviewed have less than 5 years with the city.

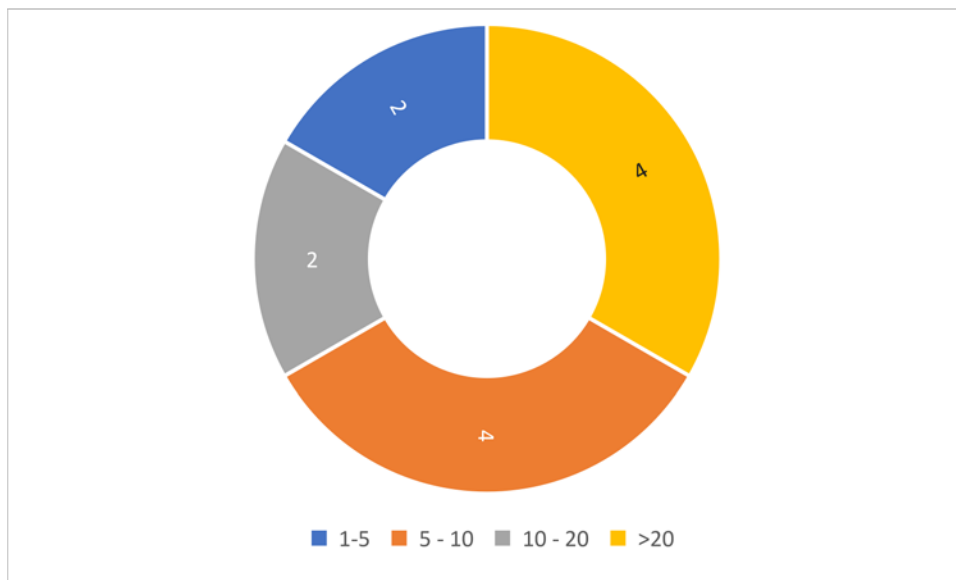


Figure 2. Chart Showing Representative Kirkland Experience (in years)

What we asked:

The interview format was freeform, allowing participants to describe their work related to surface and stormwater and what works well and what could use improvement, including ideas for capital, staffing, equipment, or programmatic action items to include in the Surface Water Master Plan. General interview themes included the topic areas below with follow-up questions and discussion based on the responses of the participant.

- Roles and responsibilities for Surface Water Management within interviewees department/group? Methods for interacting with Surface Water Management Group?
- Tools used in surface water related work- what works well, what needs improvement?
- Specific drainage related roles and responsibilities?
- Elements of success and barriers to success in surface water related work?
- Opinions on surface water priorities and suggestions for getting there?

What we heard:

The interview participants were free with information and ideas and are obviously invested in Kirkland and have the Utility's best interest in mind with the work they do. All participants were very engaged in the interviews and were very complimentary of Kelli Jones and the Surface Water Engineering Group. They were appreciative of the communication and outreach to different departments for input and appreciative of support when they request it of the Surface Water Engineering Group. Across the board, the interview participants described the work environment in a positive manner because of the staff and

ability to work across disciplines. Listed below are the primary themes we heard from the interview participants.

Capital Project Priorities and Coordination

Several of the interview participants are involved with the development and/or implementation of City capital improvement projects that could intersect with surface and stormwater CIPs or involve coordination and collaboration with the surface water engineering group.

The coordination between transportation, other utilities, Parks, Public Safety, and Facility projects and surface water capital projects requires a comprehensive approach. Coordination for stand-alone surface water projects is done through a coordinated effort between surface water engineering, capital engineering, and maintenance, and has improved in recent years. Parks has recently been more engaged with surface water engineering as park spaces are being utilized for stormwater retrofit in neighborhoods where it makes sense and park spaces are updated in the process (i.e., 132nd Square Park in the Kingsgate neighborhood) and could benefit from the comprehensive approach.

What works well

- Coordinated identification of types of projects between Capital Improvements, Surface Water, and Maintenance Divisions.
- Review of needs, planning, and capital investment (dependable infrastructure, capacity, flooding, habitat, retrofit planning, etc.).

Challenges for Capital Project Implementation

- Changing environmental permit and code requirements.
- Parks is deficient in field space, needs general open play areas that are dry (if stormwater retrofit is proposed, Park needs must be considered).
- Land acquisition is challenging due to the lack of open space and cost.
- Description of CIPs is not standardized (i.e., use of common names for transportation, surface water, parks) and it is hard to tell what the project is by the description, or the location.
- Geographical overlay of CIP projects (utility, parks, and transportation) doesn't have a time component to line up projects in space and time for better coordination.
- Transportation projects don't always have full project costs (critical areas elements, mitigation, stormwater impacts/mitigation, etc.). CIP Division has begun helping with project ideas and estimating at early stages.
- Prioritization of projects in the SW Master Plan sometimes get reprioritized through to the Capital Improvement Program.

Ideas suggested by participants:

1. Utilize new Capital Improvement Group Set-up Project Manager with in-house owners during capital project design throughout design process (set-up/scoping, kick-off, key 30/60/90/100 PSE milestones, and construction) to ensure delivery and priorities are being met.
2. Keep categories for surface water projects (i.e., aging and failing infrastructure, flooding, fish passage, etc.) as this flexibility is very helpful.
 - a. Include as many individual projects in the aging and failing infrastructure as possible.
 - b. Provide greater clarification on funding for CIP projects.
 - c. Map out timeframes for grant opportunities and likelihood of success.

3. Do more small stuff—like rain gardens in Parks.
4. Continue coordinating with Parks for retrofit opportunities.
 - a. Develop inventory of Parks that could be used for retrofit.
 - b. Check in on Parks CIP to find linkages.
5. Standardize CIP project descriptions with set phrases and intention for what the project is doing and where and items that cost money (i.e., where is the beginning and end of the project?).
6. Include another dimension to geographic overlay of CIP projects that includes time.
7. Conduct early coordination between surface water and transportation to find opportunities to work together.
8. Transportation should provide overlay earlier to surface water maintenance. Could probably provide a 3-year list that is approximate to help maintenance conduct CCTV in advance. Pavement Management System may have opportunities for self-service.
9. Capture full transportation costs during conceptual design. Stormwater costs are often not factored in, nor are environmental mitigation factors. Need better scoping.
10. Use streets in the north end (annexation area) or other areas of excess ROW for stormwater treatment or pavement reduction. Conduct excess ROW analysis. Policy may be needed for this.
11. Determine where the city wants to be exceptional from an environmental/green standpoint and focus efforts there.
12. Update prioritization process so that it produces “buckets” of projects and possibly spending amounts in each goal category (flooding, habitat, infrastructure, etc.) to allow CIP to make the dollars line up when producing the CIP. Alternatively, allow greater variance in CIP dollar amount from year to year so that projects can be scheduled in a way that makes more sense.

Operations and Maintenance

The Storm Crew is accountable for NPDES compliance (inspection and maintenance of public and private SW infrastructure), spill response, CCTV, and support for cost recovery/code enforcement involving spills.

Grounds maintenance is conducted by a separate crew. They maintain vegetation and trees in the ROW, and non-maintained ROW, facility grounds, filterras, rain gardens, ponds/retention facilities, etc.

What works well

- NPDES compliance obligations are always met well in advance. The Stormwater Maintenance Supervisor does a good job of understanding workload and planning for it.
- Crews are responsive to requests and assist other divisions and requests from CIP for camera work.
- Crews are very collaborative and know who to go to for what. There are great SOPs and City Specifications for the work they do.

Challenges for Operations Crews

- Crews are short-staffed.
 - The Storm Crew felt that they could use additional staff at the time of the interviews.
 - Span of control for the current 1 Lead crew is too great at 15.5. A second lead will help spread the workload and increase effectiveness and improve crew cohesiveness.
 - At the time of the staffing interviews, Grounds crew had one vacant position.

- Current market conditions are making recruitment efforts difficult.
- The city has grown but the size of the labor force has not kept up.
- Equipment and space needs.
 - Additional equipment is needed for efficiency, and there is a lack of space for current equipment at the maintenance yard. A planning process has begun to address space needs including factors such as materials storage, building space, outdoor covered spaces, fuel pumps, fleet buildings, gates, fencing, lighting, card key readers, and security.
- Difficult to maintain facilities on short plats.
 - Easements are needed.
- CIP/Planning isn't communicating surface water facilities that are built.
- Travel time to north part of the city (traffic).
- % of work associated with spill response.

Ideas suggested by participants:

1. Additional staff are needed for the operations crew to accomplish current workloads. Staff are needed for CCTV work, grounds, and an additional lead.
2. Some operations staff would like to see grounds brought in under surface water operations vs. funding the work in the streets/grounds division.
3. Second lead would oversee environmental and KMC compliance (manages spill response work orders and bill-outs), CCTV, and pond maintenance.
4. Look at bringing CIPP in-house to fix aging and failing infrastructure. Would require 2 – 3 employees for program, a trailer and refrigeration truck.
5. An additional CCTV truck is needed to inspect entire system within 10 years. The camera truck is in use every day following cleaning work and assisting other divisions.
6. An additional smaller vector truck is needed for hard-to-reach areas, and for potholing. One truck spends around 30 -50% of the time on potholing. Hard to reach areas are maintained by hand.
7. A second maintenance facility is needed in the northern part of the city to have better access and relieve the existing maintenance yard.
8. It would be helpful to have engineering and maintenance under one roof.
9. Decant facility is undersized.
10. Need more advance notice for where overlay is going to occur so that pipe jetting and CCTV can occur. There is usually not enough of a head start. See # 8 under ideas for Capital Project Priorities.
11. Other equipment needs that would make work easier include skid steer, concrete mixer, hot bed trailer (for asphalt repairs).
12. Add new job classifications for grounds workers to give opportunities for growth. Suggestions for advancement include tree technician, irrigation specialist, horticulturalist, grounds tech 2, more in line with Parks Department. Hard to retain staff because they cap out at grounds technician and look for pay and advancement opportunities elsewhere.
13. Review spill response procedures to identify efficiencies for possibly reducing number of responses.

Role of Urban Forestry in Surface Water

The urban forestry group is housed within planning but is funded by Surface Water. Trees and urban forestry are recognized by Council, citizens, and department leaders as important features in the landscape and there is a shared interest in preserving tree canopy. There is also a general recognition that trees are important for stormwater management, but the linkage has not been made explicit, especially with respect to what level of benefit is provided and should therefore be funded by surface water.

What works well

- Tree team that consists of staff from different departments (planning, parks, and surface water) that have a shared interest in tree canopy.

Challenges for Urban Forestry/Surface Water

- Determining how much of “urban forestry” surface water should pay for.
- Urban forestry is in another group and surface water is hands off about what decisions are made, what is done or not done, and whether the work is beneficial for surface water.
- Grounds is not always notified when new trees are planted, even though they are responsible for maintaining the trees.
- Initiatives for tree planting don’t always consider the maintenance side and the resources needed to sustain new trees.

Ideas suggested by participants:

1. Need to figure out how to fund urban forester with consistent long-term funding, rather than cobbling together funding each year. Not necessarily from SW, but just City-wise in general.

Development Review

Development engineering reviews permits for any private development within the City. This includes review and inspection of improvements within the right-of-way, as required as part of the private development. There are 14 staff (engineers, plan reviewers, and inspectors). 100% of the development review work is funded by permit fees. Interactions with the Surface Water group are when there are tricky surface water design questions or gray areas that need to be handled. There are stormwater specialists in the development engineering group. Sometimes development engineering has maintenance review plans to ensure maintainability.

Challenges for Development Review

- Surface water issues/mitigation takes most of the time in development review (over half) because designs are more complicated and trend toward low impact development.
- Up to 200 – 250 active permits are in process each week currently. Short-staffed.
- Challenging to juggle different types of development that require different lenses for permitting (e.g., single family, ROW, mixed use, schools)
- Development review is getting more challenging as builders venture into areas that are more difficult to build on—the easy areas are already built-out.

Ideas suggested by participants:

1. Improve City's stormwater system where system is either missing or undersized. This would make it easier for development, particularly in areas where Kirkland wants to concentrate new development.
2. Need new outfalls to the lake in the annexation area. It's not feasible to put water in the ground due to slope instability. Places are needed for detention and discharge.
3. Need to integrate surface water more into long term plans and decisions, especially in areas targeted for development. Surface water should be looked at on a level equal to transportation.

Code Enforcement

Spill response is one of the primary roles of the Surface Water groups under NPDES. This requires working closely with maintenance crews who are the first responders, conducting education and outreach, and following up with code enforcement and cost recovery as a last resort for repeat offenders. There is one dedicated code enforcement officer dedicated to public works.

What works well

- Single hot line for spill response so that all the calls go to a single place, and it ensures public infrastructure is protected. This is more efficient (but causes more work for the crews also).
- Division of work between Surface Water Engineering (Ryeann Marie) who does program management work (documentation, permit documentation, notification, etc.) and follow-up on tricky situations, with Maintenance who answers all calls that come in and responds to 20% without needing extra assistance from Surface Water Engineering (such as vehicle accidents). Maintenance can respond to most of the calls in the field, however Surface Water Engineering responds with education, outreach, coordination, enforcement, and other follow-up measures.
- Education and outreach (coordination internally and externally) works well and is the backbone of the program.

Challenges for Code Enforcement

- Spill response and complexity of calls have increased over the last 5 years, and now take a significant portion of time for crews to respond. Maintenance responds to every call to ensure that infrastructure is protected.
- Code enforcement takes a lot of time to build a case for enforcement action, and cost recovery. Documentation needs to be in order, and there is lots of communications, negotiations, public information requests, hearings, presentations, and ultimately collections.

Ideas suggested by participants:

1. Would hate to lose one of the two education specialists because they are such a huge help with the spill program. Education is a continuous process, and messages need to be repeated different ways and frequently.
2. More support for maintenance is needed in spill response. Maintenance meets almost weekly on code enforcement issues; the number of staff attending the code enforcement meetings could be reduced with dedicated crew representation. Would like dedicated maintenance person/lead assigned to spills.
3. Need more support for building enforcement cases. Code enforcement might need more help in their group.

4. Need support for tracking training—training administration. The person hired for this is more focused on maintenance, but it would be great if she could be focused on all public works and NPDES training requirements.
5. Review and alter the current code enforcement process. Currently, code enforcement for cost recovery is pursued most of the time when a pollutant is discharged into the MS4 (in 2021, approximately 95% of code enforcement cases were to pursue cost recovery). Fines are pursued if education has previously occurred (in 2021, approximately 35% of code enforcement cases were to pursue a fine). We could change the process to only pursue any code enforcement when education had occurred previously. This would reduce the amount of code enforcement cases and workload for both MC and SW Engineering.

Natural Resources and Surface Water

Surface water is involved in helping the city meet ecological goals and finding places to work together to accomplish shared environmental interests with other departments.

What works well

- Much of Kirkland’s parks are open space or natural areas, many of which provide beneficial surface water functions.
- Advanced mitigation program is available for City CIP projects that require mitigation.
- Surface water supports planning/urban forestry (Environmental Analyst) by helping with tree fencing for protection on development sites.

Challenges for Natural Resources and Surface Water

- Surface water provides funding for Green Kirkland, but their focus is more on removing invasive vegetation from public open spaces rather than work near streams, which would benefit surface water.
- Comprehensively managing City’s vegetated areas for plant health in an efficient manner. There are multiple departments that care for the City’s public open spaces (i.e., parks, ROW, public areas) including parks (parks), grounds (ROW, street trees, and rain gardens), and natural open spaces (public works).
- There was some lack of understanding of who cares for advanced mitigation sites after the 5-year monitoring period is up. It has been clarified that it is Parks.

Ideas suggested by participants:

1. Consider the critical areas tracts (parks/open space areas) and whether they might be better suited as surface water resources? Is there a nexus for surface water?
2. Additional flow gauging needed to understand and monitor streams.
3. Shift focus for Green Kirkland to stream resources to achieve better surface water benefits.
4. There is a need for a paradigm shift from “mow and go” in managing vegetation to integrated pest management and managing plants for better health.
5. A comprehensive city-wide vegetation management plan that was implemented by one department (parks or a new “natural resources” department) would streamline vegetation management for all the areas in the city that need care (i.e., parks, open spaces, street trees, ROW, rain gardens, filterterras, etc.).

Other Surface Water Issues and Ideas

Interview participants brought up additional challenges and ideas that were outside of the topics described above. These are listed below.

Challenges

- Sustaining Council awareness, interest, and support for importance of surface water programs.
- Thinking across disciplines and making connections to better inform projects (ex., transportation not considering SW or critical areas impacts until late in the process).
- Retrofit planning – planning by subbasin may lead to design of projects with high-cost relative to benefit.

Ideas suggested by participants:

1. Surface water dashboard to communicate achievements and progress of surface water group and programs to Council and public.
2. Policy and strategies to create higher level thinking across disciplines, especially related to City values like environmental sustainability. City wants to be “green” but does things that are counter to that sometimes, unknowingly.
3. Consider revising retrofit planning by looking at potential projects across a whole watershed rather than subbasins, and then developing conceptual designs for those that provides the greater benefit relative to their cost.
4. Identify better tools, such as SUSTAIN or other prioritization schemes, for use in prioritizing and justifying retrofit projects.