Jackson Town Council Workshop

February 19, 2019
3:00 PM
Town Council Chambers

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I. CALL TO ORDER AND ROLL CALL

II. EMPLOYEE INTRODUCTIONS

A. Miriam Kellams, Information Coordinator - Police Department

III. WORKSHOP ITEMS

A. Stormwater Overview (Floren Poliseo, 30 minutes)

B. Small Cell Wireless Discussion (Paul Anthony & Lea Colasuonno, 30 minutes)

IV. PROPOSED ITEMS FOR FUTURE WORKSHOPS

A. 3/18 District One and Historic Preservation RFP (Tyler Sinclair, 30 minutes)

B. 3/18 Century Link Franchise Agreement (Audrey Cohen-Davis, 30 minutes)

C. 3/18 Liquor Code Update (Sandy Birdyshaw, 45 minutes)

V. ADJOURN

A. Adjourn meeting to executive session to consider matters concerning litigation to which the governing body is a party or proposed litigation to which the governing body may be a party in accordance with Wyoming Statute 16-4-405(a)(iii).

Please note that at any point during the meeting, the Mayor and Council may change the order of items listed on this agenda. In order to ensure that you are present at the time your item of interest is discussed, please join the meeting at the beginning to hear any changes to the schedule or agenda.

TOWN OF JACKSON
WORKSHOP DOCUMENTATION

SUBMITTING DEPARTMENT: Public Works **PRESENTER**: Floren Poliseo

WORKSHOP DATE: February 19, 2019

SUBJECT: Stormwater Overview

PURPOSE OF WORKSHOP ITEM

Provide to Council a compilation of Jackson's existing stormwater management recommendations and planning documents, the status of our efforts so far, and additional information and recommendations for updating our stormwater programming.

DESIRED OUTCOME

To provide Town Council a comprehensive update, awareness and understanding of the stakeholders, plans, and efforts to date, and proposed next steps for planning and implementing a new stormwater strategy for Jackson. Staff welcomes Town Council input, feedback and discussion.

BACKGROUND/ALTERNATIVES

Work done to date:

Many organizations and members of the Jackson community are interested in the water quality of Flat Creek, Cache Creek, and Spring Creek. Several action plans have been formed and implemented to date. The Town of Jackson set forth a stormwater plan in 2001, and other stakeholders have produced plans that include recommended actions by the Town. These are the four existing plans, and a brief description of each:

- Town of Jackson – 2001 Surface Water Drainage Infrastructure Master Plan
  This plan provides a set of recommended projects and funding sources that aim to preemptively work toward compliance with the Clean Water Act's National Pollutant Discharge Elimination System (NPDES) requirements, although these regulations did not yet apply to the Town. NPDES mandates include six minimum control measures (MCMs):
  1. Public education and outreach
  2. Public involvement/participation
  3. Illicit discharge detection and elimination
  4. Construction site stormwater runoff control
  5. Post-construction stormwater management in new development and redevelopment
  6. Pollution prevention/good housekeeping for municipal operations

- Teton Conservation District – 2006 Flat Creek Watershed Management Plan
  The authority to regulate NPDES requirements is placed on each State. In Wyoming, the Wyoming Department of Environmental Quality (DEQ) maintains this authority. In 1996, as required, DEQ completed an assessment to designate the beneficial use for each of the State's surface waters. If the water quality of a waterbody does not accommodate its designated use, then it is listed as threatened or impaired. Flat Creek was listed as threatened because its beneficial uses (aquatic life and cold water fisheries) were determined impaired due to sediment loading from urban stormwater runoff. As such, DEQ required either a locally led watershed management program or compliance with a numeric limit on the quantity of the pollutant causing impairment in the waterway, known as a total maximum daily load (TMDL). This Plan complied with the local planning option.

- Jackson/Teton County – 2012 Comprehensive Plan
  This Plan established 3 common values that define the community character:
  - Ecosystem stewardship
  - Growth management
  - Quality of life

  It sets forth a series of principles, or goals, related to these common values, and policies that help achieve those principles.

- Snake River Fund – 2018 Flat Creek Blueways Project Report
  The Snake River Fund established objectives for Flat Creek in its Flat Creek Blueways Project. This report suggested ways to achieve the following goals:
  - Improve instream and riparian habitat along the creek
  - Incentivize low impact development and redevelopment along the creek
  - Improve community access to the creek corridor
  - Make the creek part of the community's identity
  - Expand green infrastructure for stormwater treatment, water quality improvements, and flood control

The following four attachments provide a more thorough analysis of work done to date. Review of this document and the attachments will help you gain the full picture of all that has been recommended, which of those initiatives have been accomplished, how they have been accomplished, and a related possible future action. For example: to address some initiatives, the Town created LDRs related to land use in watershed areas, and these LDRs may be due for reassessment and updates based on new considerations. The current recommended actions (or next steps) provided represent concepts and considerations for inclusion in the process of developing a new plan.

Attachment A: status and suggested next steps for the initiatives set forth in the ToJ Surface Water Drainage Infrastructure Master Plan

Attachment B: status and suggested next steps for the initiatives set forth in the TCD Flat Creek Watershed Management Plan

Attachment C: status and suggested next steps for the initiatives set forth in the Jackson/Teton County Comprehensive Plan

Attachment D: status and suggested next steps for the initiatives set forth in the Snake River Fund Flat Creek Blueways Project Report

Proposal:

The Town has done a lot of great work in this realm, successfully enacting many of the plans' initiatives through partnerships, LDRs, and capital projects, as well as additional projects and measures not included in these plans that the Town recognized were important to do. The Town of Jackson has participated in this highly important work because of its commitment to meeting and exceeding its Vision: Preserve & Protect the Area's Ecosystem. An opportunity exists now to create a fresh strategy that encompasses an updated approach to the common goals and ideals of the prior plans. The Town is the right entity to assume the leadership role in creating a comprehensive and holistic storm water management plan that considers all three creeks running through its boundary, in collaboration with relevant partners and stakeholders who also care about the health of these waters.

There is more work to do, and we propose developing a ToJ Stormwater Management Plan with major updates to carry us through the next 15-20 years. This new plan would replace the 2001 Surface Water Drainage Infrastructure Master Plan. Rather than working in a silo/bubble, this new plan would dovetail with the Comprehensive Plan and the soon-updated Flat Creek Watershed Management Plan as a guiding document for Town to implement stormwater management best practices to achieve the overarching plan goals. Plan components could include the six MCMs listed above, as well as private commercial/industrial pollution prevention, creating new laws or codes such as a dedicated stormwater district/utility and fee structures, providing to the development community more detailed design direction or standards for permit compliance, and others.

Many of these programs aim to share responsibility in controlling pollution sources, reducing the reliance on municipal treatment at discharge. The plan would also include measurable goals to understand whether we achieve desired outcomes.

Benefits:
Nearly everyone agrees that the health of our creeks is important. By reducing pollution contributions, we protect wildlife habitat and the aesthetic and economic value these local natural resources present. Maintaining good water quality of these surface waters also benefits our downstream neighbor communities, and the region at large, in the same ways.

Additional benefits of an updated stormwater program are

- increase the collective sense of pride and ambition among all involved community partners
- protect this community's treasured natural assets and the larger ecosystems they help support
- reduce total capital costs through comprehensive planning and the ability to align stormwater initiatives and projects with other capital needs
- reduce future strain on staffing and financial demands by complying with potential future regulation

Issues and opportunities:
To create such an ambitious plan, we have a lot working in our favor:

- Existing guiding documents – Town LDR updates for zoning-based regulations and incentives help support the Town vision to preserve and protect the area's ecosystem. The Comprehensive Plan includes multiple principles and policies that stormwater management efforts help support. More detail about what has been accomplished on these topics and how we might proceed is included in Attachment C.
- Regulatory scope/applicability – Town of Jackson (ToJ) currently meets all discharge permit requirements for its creeks. Thaw wells have monitoring and reporting requirements, which Public Works (PW) performs regularly. The Town's wastewater treatment plant has a discharge permit, which PW is also responsible for. Individual stormwater permits are required for certain projects/activities, both public and private. The State has not issued a Municipal Separate Storm Sewer System (MS4) permit to the Town or County. These permits often require municipalities to develop robust stormwater programs that are sometimes prescriptive or narrowly focus on meeting certain pollutant TMDLs for compliance. Because we are not subject to such mandates, we can create our own initiatives to achieve our established vision.
- Voluntary programming – because TOJ is not required to have an MS4 or other stormwater permit for its stormwater system, all our proposed efforts are voluntary and continue to build trust and collective action among concerned citizens, downstream municipalities, public and private partners, and other stakeholder groups. Voluntary programs also provide more flexibility for local communities to have more control in decision making for project prioritization and fund allocations. One challenge for voluntary programs is securing dedicated, ongoing funding because these programs are not mandated and are not associated with the urgency of non-compliance violations/fines avoidance.
- Integrated Planning – recent congressional updates to the Clean Water Act codified EPA's Integrated Planning framework into the law. This equips local communities with the ability to better manage costs and prioritize their clean water investments. Although the Town is not subject to NPDES regulation, this framework can help guide our goalsetting and project prioritization.
- National status quo – All major cities' (Phase I) and most small communities' (Phase II) MS4 programs have been in place for decades. There is a wealth of existing experiences and resources to draw from in determining what stormwater programs and practices may be most applicable and cost-effective for Jackson. Learning from others can help us avoid unforeseen pitfalls and utilize innovative approaches that are proven successful.

A new stormwater program requires support by maintenance and funding plans. This should be included in the updated planning efforts, documented, tracked, evaluated, and adapted as needed over time. Considerations for ongoing maintenance and funding are discussed below in the Fiscal Impacts and Staff Impacts sections of this document.

Process/strategy:
Once Council provides direction, staff will include proposed plans and/or projects, and funding sources in upcoming budget and CIP drafts for further consideration.

COMPREHENSIVE PLAN ALIGNMENT

Refer to Attachment C.

STAKEHOLDER ANALYSIS

Final decision makers are the Town Mayor and Council.

People affected by the outcome include community residents and visitors (enjoyment of our waterways), ToJ (implementing the desired actions by Council), and partnering entities (TCD, Teton County and joint departments, relevant community groups).

People who may have power to assist or block a decision include the Wyoming Department of Environmental Quality (DEQ) (depending on applicable regulations, current and future), or other locally applicable jurisdictions. For example, if we sought funding from DEQ or federal sources, then a plan or capital project may be subject to certain criteria in order to obtain that funding, and a new rule or policy may be subject to other existing regulations. Should the State issue a new stormwater discharge permit, some of our management activities may be subject to approval by the regulator in advance of or to continue implementation.

In all cases, as stated above in the Benefits section, it is likely that all stakeholders agree that reducing negative impacts to the creeks is a desirable outcome. The Town can boldly lead this charge and leverage our partners to provide expertise and financial support.

FISCAL IMPACT

As this agenda item is intended to be a current status/overview of prior stormwater plans/initiatives, specific costs have not been estimated. Considerations are described here.

Stormwater programming has traditionally taken place project-by-project based on priorities or response to specific needs at the time. To implement a more robust stormwater program, and construct new stormwater infrastructure, could require significant additional funds. Anticipated costs of initiatives and projects, including capital and operation and maintenance (O&M), should be planned throughout the 10-year CIP based on Council prioritization, available budget, and staff capacity. PW currently maintains Town-owned stormwater infrastructure and presumably would take on maintenance of new stormwater infrastructure.

Funding sources include the 5th cent, multiple types of grant funding, and partner cost sharing. We have been successful through partnerships with DEQ, TCD, One Fly, Trout Unlimited, Ducks Unlimited, 1% for the Tetons, JH Land Trust, and National Fish & Wildlife Foundation for shared grant opportunities. As discussed in Attachment A under the Funding section, creating a stormwater utility or other fee structure would help ensure success of new programming, and current Wyoming statutes seem to accommodate this through necessary processes.

STAFF IMPACT

The overall staff impact of new stormwater program development and implementation is moderate.

Coordination with other Town and County departments, Teton Conservation District, and other stakeholders must occur. This will minimally increase staff time commitments.

Other likely staff time commitments include:

- Updated GIS mapping of Town infrastructure for completeness and accuracy.
- Research, coordination, and planning among Departments and with Council.

- Providing technical input and coordinating with consultants and other stakeholders as required.
- Rulemaking, inspections, enforcement, and possibly billing and tracking.
- Implementing capital projects, including plan reviews and coordination through design and construction management.
- Additional inspections and ongoing operation and maintenance.
- Providing educational and participatory opportunities for the public.
- Updating and implementing standard operational procedures.

LEGAL ISSUES

The Town Attorney has not yet been provided the opportunity to review this issue. However, because this is an informational staff report without need for action, legal review was not necessary at this time. Should the Council direct staff to proceed with one of the stated options, the Town Attorney may need to be involved to provide Council with legal review depending on which option is selected.

ATTACHMENTS

These four attachments include the status and suggested next steps for each initiative proposed in the associated plan:
Attachment A – ToJ Surface Water Drainage Infrastructure Master Plan
Attachment B – TCD Flat Creek Watershed Management Plan
Attachment C – Jackson/Teton County Comprehensive Plan
Attachment D – Snake River Fund Flat Creek Blueways Project Report

RECOMMENDATION

A new stormwater management plan and associated LDR updates provide a direct means to accomplish Town Council Priority #4: Improving/Protecting Flat Creek Riparian System, as identified at the Council Retreat at the beginning of the year. Staff recommends that Council review this material in more depth, ask questions, and continue discussions. Staff also recommends that Council provide more direction, either now or upon further review, regarding any aspects of the listed topics or suggestions for which more information is desired.

SUGGESTED MOTION

I move to direct staff to continue to work with Council as needed to provide more information upon request, progress toward a scope or outline for a Town of Jackson Stormwater Management Plan, and determine a course of action at a later date yet to be determined.

Attachment A: Surface Water Drainage Infrastructure Master Plan (Town Of Jackson, 2001)

Stormwater related initiatives/recommendations set forth by this guiding document are listed below (Master Plan page IV-1, PDF page 12). The status of each recommendation is noted, current as of February 2019, along with a proposed next step.

Private properties:

- 10-year storm event – on-site retention; release rate no greater than undeveloped state

  Status: this is Consistent with current Town practices but is not included in the LDRs.

  Current recommended action: update Town LDRs to match

- >10-year storm event – off-site release allowed to an approved public facility (may include properly designed/constructed public street)

  Status: this is consistent with current Town Practices but is not included in the LDRs.

  Current recommended action: re-evaluate how Town wants private properties to address >10-year events, and then update Town LDRs to match the desired policy.

Public collection system infrastructure:

- Design to accommodate storm events up to and including the 100-year storm event
  - Underground infrastructure (inlets and conduits) sized for 25-year storm event

    Status: this is consistent with current Town practices.

    Current recommended action: update Town LDRs to match.

  - Streets designed for 100-year storm event (within curbed areas, reduce by amount entering collection system)

    Status: Staff has not reviewed consultant plans for street stormwater volumes and is unsure if streets have been designed to meet this goal.

    Current recommended action: consider including this in LDRs and determine the appropriate review process.

- Curb inlets, manholes, storm drain lines, impound basins, and thaw wells
  - Refer to **General Collection and Treatment Infrastructure Installation Recommendations**, starting on page 9 of this document (excerpted from this section of the Master Plan: pages IV-6 to IV-11, PDF pages 17-22)

    Status: as noted on **General Collection and Treatment Infrastructure Installation Recommendations**, starting on page 9 of this document. Town has implemented some practices but not all, as shown on PDF. (A green circle indicates implemented, an orange circle indicates a portion of the work has been done or is in progress.)

Current recommended action: Re-assess this infrastructure plan to determine if more cost-effective or efficient project options are available for those items not yet implemented.

- 8-year plan – so that infrastructure is complete in 2010 when NPDES first applies to Town

  Status: as noted on **General Collection and Treatment Infrastructure Installation Recommendations**, starting on page 9 of this document. The Town still does not have any NPDES requirements.

  Current recommended action: As part of a more holistic planning effort, create a new timeline or phasing of these and/or alternative projects considering Town and Council priorities and other projects in the 10-year CIP.

Public treatment system infrastructure

- Treat all discharges prior to delivery to Cache and Flat Creeks

  Status: Some treatment practices are in place, but not all discharges are treated. An outfall inventory is neither complete nor fully accurate.

  Current recommended action:

  1. Complete an accurate geodatabase (GIS) of the storm drainage system in town, including for each outfall the specific set of collections infrastructure that drains to it and the drainage basin or "sewershed" delineation. Include any known information about private outfalls and drainage areas.

  2. Re-consider the treatment-only option suggested for pollution control. Most regulated cities and towns across the country meet stormwater discharge pollution reduction requirements through pollution source controls and monitoring programs. Pushing the treatment responsibility onto polluters incentivizes them to identify ways to improve their operations or materials use in order to reduce their contributions at the onset (less to treat, so costs less to comply). When the municipality takes on the responsibility of all treatment, the municipality is on the hook for ongoing maintenance and continuous upgrades in treatment systems as pollution removal needs continue to increase, branded product lines or services are discontinued, or new requirements are imposed in the future. This can end up being much more costly over time for the municipality. Additionally, conducting cost-benefit analyses of treatment projects and product options will help ensure that public funds are getting the most bang for the buck on actual water quality improvement. Achieving high levels of treatment can have diminishing returns from a cost-to-pollutant reduction ratio perspective.

- Use treatment products manufactured by Aqua Shield under standard circumstances

  Status: Town has installed some Aqua Shield units, as well as other brands.

  Current recommended action: Re-consider relying on only one company for all of our discharge pollution treatment needs. This is financially risky, as the company may not survive forever, or may not appropriately address future needs. Brand or product selection should be based on Town's determination that it is the most cost-effective long-term solution to address local

pollution problems, and this may be location- or issue- specific in different drainage basins in town. Since this plan was completed, many more companies and products are available and this is a competitive market due to increased regulation and innovation.

- Locate and size treatment facilities as set forth in this plan
    - Refer to **Recommended Surface Water Drainage Treatment Infrastructure Selection**, page 15 of this document (excerpted from this section of the Master Plan: Table VII-D-1, PDF page 84)

      Status: as noted on **Recommended Surface Water Drainage Treatment Infrastructure Selection**, page 15 of this document. Town has implemented some practices but not all, as shown on the PDF. (A green circle indicates implemented, an orange circle indicates some work has been done.)

      Current recommended action: Re-assess the infrastructure plan in the context of the larger, updated planning effort and to determine if more cost-effective or efficient options are available for those items we have not yet implemented. Re-consider the treatment-only option suggested for pollution control.

- Install "no dumping" plaques at all collection system inlets

  Status: Some plaques are installed, but we are far from completing this for existing inlets. This is included in Town's construction standards for newly installed or replaced inlets.

  Current recommended action: Decide whether to gradually or all at once add plaques/medallions to existing inlets, and include them in the budget accordingly. Continue to use the construction standards for installing them on new and replaced inlets.

- 8-year plan – so that infrastructure is complete in 2010 when NPDES first applies to Town

  Status: as noted on **Recommended Surface Water Drainage Treatment Infrastructure Selection**, page 15 of this document. The Town still does not have any NPDES requirements.

  Current recommended action: Following plan updates and re-assessment of projects, create a new timeline or phasing of these and/or alternative projects considering Town and Council priorities and the 10-year CIP.

Public infrastructure maintenance

- Regularly clean floatables out of treatment units and dispose at Teton County trash transfer station

  Status: Cleaning historically occurred every 5 years, and in recent history has occurred on a biennial basis (every two years). Town collects a lot of floatables (street litter such as bottles, bags, or food wrappers/containers) at a treatment unit by the 5-way near Bubba's. The Town's vacuum sweeper is used to clean these out.

  Current recommended action: Consider purchasing a screen to separate the trash out of the sweepings pile prior to reuse/disposal.

- Regularly clean oil and petroleum out of treatment units and dispose at Sweetwater County Solid Waste District No. 1 hazardous waste facility in Rock Springs

  Status: Cleaning occurs biennially. Some of the filter bags in the treatment units collect oil and petroleum. Town disposes dried filter bags at the Trash Transfer Station.

  Current recommended action: Continue to properly dispose filter bags.

- Regularly clean sediments out of treatment units and dispose by spreading and drying, testing for 100ppm oil, reuse if less or haul to landfill if more

  Status: Cleaning occurs biennially. Town hires Western Hydrovac for sediment removal. Collected sediment is dried in a holding area (lately at the START Bus facility in the absence of a designated area), and disposed. To the knowledge of current staff, Town has not tested nor reused any of this material.

  Current recommended action: Assess how much material is collected and whether it is reasonable to test and reuse it. Consider storing it until there is enough that testing/reuse is potentially worthwhile.

- Expand street sweeping program for winter road sand/salt, and reuse or dispose as with recovered sediments

  Status: The Town has expanded its street sweeping program since this Plan was published. In the spring during snow melt, additional (peak) sweeping occurs. The Town has used/rid all sweepings sediment collected within the same year, mostly in capital projects for utility pipe bedding.

  Current recommended action: Consider whether the recommended testing program is optimal or if alternative/additional pollutants should be evaluated. Determine feasibility of Town implementation.

- Maintain at frequency set forth in the Plan, unless observation/experience deems appropriate modification to frequency

  Status: Staff has tested out different inspection frequencies, and is in the process of developing a maintenance program based on observations.

  Current recommended action: Complete and document a maintenance program for all types of treatment units installed. The program will include inspection frequencies and maintenance procedures. If the completed evaluation did not already do so, determine the optimal cleaning cycle(s) considering different inspection frequencies seasonally and annually.

Equipment/facilities

- Acquire a Badger Vac-truck to retrieve sediments from treatment units

  Status: Sediment removal from treatment units has been contracted primarily to Western Hydrovac. Town owns a regenerative-air vacuum sweeper, but it does not have the capacity/ability to service the treatment units.

Current recommended action: Consider the Town's sweeper, vac-truck, and sewer jet equipment replacement schedule, and how best to fill our fleet based on cost-efficiency in the types of sweepers/vacs we own versus contract out for certain types of work. Also consider current staff capacity in this evaluation.

- Acquire a specialized vehicle to retrieve floating oils from treatment units and transport to hazardous waste landfill (could also be a Badger Vac-truck)

  Status: The Town has typically contracted Western Hydrovac to perform this work.

  Current recommended action: Continue to contract as Town determines the optimal equipment fleet based on operational need and costs of contracted services. Once the optimal fleet/program is established, contract those services deemed most appropriate for outsourcing.

- Secure/designate a site for storing and drying collected sediment and road sand

  Status: Collected sediment is dried in a holding area, currently at the START Bus facility in the absence of a designated area.

  Current recommended action: Include this material with that collected from treatment units (if appropriate) for volume assessment and potential testing/reuse. As Town master plans the land it owns that is either undeveloped or not fully developed to zone, consider space requirements for storage, spread-drying, and testing sediments or other collected spoils as part of Public Works operations.

- Acquire/designate a pick-up truck for collection, treatment, thaw well, and snow-making systems O&M

  Status: Town Public Works Fleet includes several vehicles dedicated to multiple operations and activities, including those listed here.

  Current recommended action: Continue to maintain fleet and plan for vehicle replacements through the annual budget process to optimize operations.

- Acquire/contract an additional street sweeper for the recommended enhanced sweeping services

  Status: The Town has expanded its street sweeping program since this Plan was published. As of 1997 Town had one sweeper in the fleet, then purchased a second one in 2001 or 2002 and a third one in 2007. The Town's regular street sweeping program uses 9 zones that typically are all completed within 10 days. In the spring during snow melt, additional (peak) sweeping occurs. Additional sweeping is also conducted in the fall for excess leaves.

  Current recommended action: Consider the Town's sweeper, vac-truck, and sewer jet equipment replacement schedule, and how best to fill the fleet based on cost-efficiency in the types of sweepers/vacs we own versus contract out for certain types of work. Consider current staff capacity in this evaluation.

Staffing

- Two Maintenance Worker II for collection and treatment systems maintenance (shared with snow plowing in winter)

  Status: The Town Public Works Wastewater Division has two Senior Collection System Operator positions that require licensure. These two staff are shared with the Streets Division for winter season plow operations. Current staff believes these positions already existed prior to this Plan.

  Current recommended action: Maintain current staffing for these core functions.

- One Maintenance Worker II for thaw well/snow-making systems O&M (shared with alternative duties in summer)

  Status: Town Public Works does not have a staff person dedicated to thaw wells, but these duties are covered by existing staff as needed. Current staff is uncertain as to the intent for including snow-making systems in this recommendation, and does not have anyone dedicated to snow making activities.

  Current recommended action: Maintain current staffing to perform the core function of maintaining thaw wells.

Funding

- Secure funding for the 8-year installation of infrastructure recommended in this Plan, and seek Clean Water Act (CWA) 319 grant funding (which does not apply to compliance measures, thus would not be available after 2010 when Jackson is subject to NPDES)

  Status: The Karns Meadow stormwater/wetlands project utilized significant CWA 319 grant funding. Teton Conservation District provided 50% cost sharing for some of the sediment collection units, and provided partnering funds on other projects such as street sweeping and the Karns Wetland. Additionally, the Town still does not have any NPDES requirements, thus still qualifies for CWA 319 grant funding.

  Current recommended action: Maximize use of CWA 319 funding, and include appropriate projects in the CIP using other funding sources as needed. Consider use of Lodging Tax funds to aid in capital projects and operation & maintenance programs as appropriate/applicable.

- Explore General Fund and Surface Water Drainage Utility funding sources

  Status: The Town is interested in Stormwater Utility as a funding source, as it can support a new stormwater management program by establishing some type of stormwater fee to cover the costs of constructing and maintaining stormwater infrastructure (in a similar manner as water and sewer funds are appropriated to constructing and maintaining those system, and as general fund or 5th cent fund is applied to streets and other publicly beneficial infrastructure). In accordance with Title 16 Chapter 10 Article 1 “Surface Water Drainage Utility Act,” the Town may establish such a utility to charge user fees to finance all or a portion of designing, planning, constructing, reconstructing, acquiring, operating, improving, extending and maintaining the surface water drainage system. This article states that a city or town shall establish such a utility by ordinance and voter approval. However, House Bill No. HB0298 “Surface water drainage

systems-2" failed in a 4-5 vote on February 1, 2019. The bill is postponed indefinitely with no committee meetings or floor sessions scheduled, and Town staff has not yet researched the potential subsequent processes to raise it again. Staff is also uncertain if/how this relates to the current statute cited above that allows for a utility.

Current recommended action:

1. Identify funding sources for implementing stormwater management practices.

2. Work with Town Legal Department to research statutes and other applicable laws related to the Town establishing a stormwater utility.

3. If a law prohibits Town from establishing a utility, consider creating a stormwater district as a stop-gap (assuming that is legally possible).

4. If a law prohibits Town from establishing a utility, educate legislators on the importance of and need for a Stormwater Utility, and encourage them to gather support and bring it to bill again when possible.

- If Town selects a Surface Water Drainage Utility funding source, base fees on zoning designations and impervious area ratio requirements

  Status: Utility funding is as noted in the above item.

  Current recommended action: Evaluate current practices across the country, which have evolved since this Plan was published. Determine whether an alternative fee basis would be more appropriate for Jackson.

- Seek CWA Section 319 60/40 Matching Grant Funds to fund recommended infrastructure installation

  Status: Town previously used CWA 319 grant funding for the Karns Meadow project.

  Current recommended action: Maximize use of CWA 319 funding, as the Town still does not have any NPDES requirements and thus qualifies for these grants.

Public education and outreach

- Create a Flat Creek/Cache Creek water quality monitoring program
  - Teton Conservation District (TCD) works with Teton County School District No. 1 to have science students perform the sampling and recordkeeping

    Status: TCD works with students through Teton Science School and Central Wyoming College.

    Current recommended action: Continue this partnership, and consider ways to utilize data collected so far to aid in water quality improvement program development.

  - Educate students on the "no dumping" plaques and provide opportunity for them to observe the removal/disposal of materials from treatment units

    Status: Current staff is unaware of this specific education taking place.

Current recommended action: Consider partnering with TCD to include this in curriculum or as part of the sampling/recordkeeping program. Consider inviting/scheduling student groups or the general public to witness cleaning activities, and have staff or other technical experts provide informational education and answer questions during the event.

◯ = completed/installed

◯ = partial installation or in progress

GENERAL COLLECTION AND TREATMENT INFRASTRUCTURE INSTALLATION RECOMMENDATIONS (By Drainage Basin)

Upper Kelly Avenue Basin

- ◯ Collection structures and lines to accept and carry runoff from the Snow King Estates Subdivision,
- A treatment unit to treat runoff from the Snow King Estates Subdivision, and
- Informational plaques at every system inlet (existing and recommended) within the basin.

Some informational plaques have been installed, but not on 100% of storm system inlets. (Note applies to each basin - we do not have complete data for inlets with/without.)

Lower Kelly Avenue Basin

- ◯ Collection structures and lines in the vicinity of the current Kinder Campus (future Community Center for the Arts site),
- ◯ Nine treatment units (of varying size) to treat runoff (primarily street and parking lot runoff) from within the basin before it enters the Kelly Avenue Diversion Tube, and
- Informational plaques at every system inlet (existing and recommended) wi

We don't have individual units, but all of this drainage is treated at Karns Meadow Treatment Wetland

Lower Cache Creek Basin

- ◯ Numerous collection structures and lines,
- ◯ Numerous treatment units, and
- Informational plaques at every system inlet (existing and recommended) within the basin.

St. Johns Hospital/NER Headquarters Basin

- ◯ None, unless the decision is made to pursue directing runoff from the basin into the Town of Jackson collection and treatment system, in which case collection, treatment, and informational infrastructure will all be required.

Gill Addition Basin

- ◯ No new collection structures or lines.
- Treatment of the runoff collected within the basin *should* take place; however, the recommendation incorporated in this plan calls for the treatment to

take place downstream of the Gill Addition Basin within the Lower Cache Creek Basin.

- An informational plaque at the one existing system inlet within the basin.

North Flat Creek Basin

- A number of collection structures and lines, most of which are extensions of infrastructure recommended for the Lower Cache Creek Basin that will extend through the North Flat Creek Basin,
- Several treatment units (which will have to be located and sized as the MAC Project moves into development), and
- Informational plaques at every system inlet within the basin.

East Saddle Butte Basin

- None.

Original Townsite Basin

- Two collection structures and lines on the north side of the West Broadway Avenue just west of Jackson Street,
- No treatment units (treatment of the runoff collected on West Broadway Avenue is recommended to take place downstream of the Original Townsite Basin within the Pearl Avenue/Broadway Avenue Basin), and
- Informational plaques at every system inlet (existing and recommended) within the basin.

Pearl Avenue/Broadway Avenue Basin

- Five collection structures, a manhole, and seven lines, including the replacement (with a larger-sized line) of an existing line in West Broadway Avenue,
- One significantly-sized treatment unit located at the lower (west) end of the basin just before the runoff is delivered to Flat Creek (Note: treatment of all of the runoff collected within the basin should take place. Some of the treatment is recommended to take place at the identified location and some of the treatment is recommended to take place within the Lower Kelly Avenue Basin just before the runoff is delivered to the Kelly Avenue Diversion Tube.), and

- Informational plaques at every system inlet (existing and recommended) within the basin.

Snow King Basin

- Collection structures and lines:
  - At the south end of South Millward Street,
  - Connecting the low point along Aspen Drive with the system in Snow King Avenue, and
  - Within Flat Creek Drive connecting between Pine Drive and the system in snow King Avenue,
- One very large treatment installation (two treatment units in parallel) at the southwest corner of the Fair Grounds to treat all flows from upstream of that point within the basin and two small inlet inserts to treat small flows entering the curb inlets on Flat Creek Drive just north of Snow King Avenue, and
- Informational plaques at every system inlet (existing and recommended) within the basin.

Karns Hillside Basin

We installed collection and treatment infrastructure here, based on our own evaluation of needs.

- No new collection structures or lines,
- No new treatment units, and
- Information plaques at the four existing system inlets within the basin.

Karns Meadow Basin

- No new collection infrastructure,
- A significantly-sized treatment unit at the outlet to Flat Creek from the existing storm drainage system in the vicinity of the Five-Way Intersection (within the Pearl Avenue/Broadway Avenue Basin) and four curb inlet insert-type treatment units along Snow King Avenue at existing curb inlets, and
- Informational plaques at the four existing curb system inlets within the basin.

Scott Lane Basin

- No new collection infrastructure,
- One significantly-sized treatment installation (two treatment units in parallel) at the outlet to Flat Creek at the south end of Scott Lane, and
- Informational plaques at every existing system inlet within the basin.

Stacy Lane Basin

- None.

Powderhorn Lane Basin

- No new collection infrastructure,
- One significantly-sized treatment installation (two treatment units in parallel) at the outlet to Flat Creek at the south end of Powderhorn Lane, and
- Informational plaques at every existing system inlet within the basin.

Dogwood Drive/Elk Run/Creekside Basin

- No new collection infrastructure,
- One small curb inlet insert treatment unit within Dogwood Drive,
- An informational plaque at the existing Dogwood Drive curb inlet, and
- Installation of a dedicated thaw well at the upstream end of the Elk Run Condominiums development.

Hillside Subdivision

We installed collection and treatment infrastructure here, based on our own evaluation of needs.

- No new collection infrastructure,
- No new treatment infrastructure, and
- Informational plaques at every system inlet (existing and due to be constructed as part of the Town of Jackson Hillside Subdivision Infrastructure Improvements Project) within the basin.

Buffalo Way Basin

- No new collection infrastructure,
- No new treatment infrastructure, and
- Informational plaques at every existing system inlet within the basin, including those within the Webster Laplant Homestead housing development.

Meadowlark Lane Basin

- No new collection infrastructure,
- No new treatment infrastructure (except that recommended for within the Highway 89 Basin downstream of the Meadowlark Lane Basin), and

- Informational plaques at the two existing system inlets within the basin.

Horn Enterprises Basin

- No new collection infrastructure,
- No new treatment infrastructure, and
- Informational plaques at the two existing pipe inlets within the basin.

Hidden Ranch Basin

- No new collection infrastructure,
- No new treatment infrastructure (except that recommended for within the Highway 89 Basin downstream of the Hidden Ranch Basin), and
- Informational plaques at the existing pipe inlet on Stellaria Lane and at the inlets within the Movieworks Plaza.

Gregory Lane Basin

- Seventeen curb inlets, seven manholes, and twenty-four collection network pipe segments
- One large treatment unit, perhaps augmented by a pumped discharge,
- Informational plaques at all the existing and proposed curb inlets within the basin,
- A clean water interpretive park at the outlet to Flat Creek just below the pathway bridge on Gregory Lane, and
- Installation of a dedicated thaw well just below the point where Flat Creek crosses under Highway 89 north of High School Road.

Middle School Basin

- No new collection infrastructure,
- No new treatment infrastructure, and
- Informational plaques at the existing curb inlets on South Park Loop Road.

Cottonwood Park Basin

- None.

Indian Trails Basin

- None.

Highway 89 Basin

- A diversion structure within the bottom end of the collection network to divert smaller storm event flows to the recommended treatment infrastructure,
- Lines to connect the diversion structure to the recommended treatment installation and back to the main line,
- One large treatment installation (two treatment units in parallel) installed within the Highway 89 right-of-way east of the east curb line of the highway south of Stellaria Lane, and
- Informational plaques at all the existing curb inlets within the basin and upstream of the basin within the West Broadway Avenue/Highway 89 right-of-way.

= completed/installed

= partial installation or in progress

TABLE VII-D-1

TOWN OF JACKSON
RECOMMENDED SURFACE WATER DRAINAGE TREATMENT
INFRASTRUCTURE SELECTION

SYSTEM	REFERENCE NO.	PIPE DIMENSIONS	PIPE TYPE	n	COEFFICIENT C_1 (1.486/n x A x $R^{2/3}$)	SLOPE, S FT/FT	$S^{1/2}$	FLOW, Q (C_1 X $S^{1/2}$)	RECOMMENDED TREATMENT UNIT			COMMENTARY
									MANUFACTURER	TYPE	UNIT	
EAST JACKSON STREETS	5001								AQUASHIELD	AQUA-FILTER	AF-8	SIZED AS PART OF EAST JACKSON STREETS EFFORT
	5002		CMP	0.013					AQUASHIELD	AQUA-FILTER	AF-9	SIZED AS PART OF EAST JACKSON STREETS EFFORT
	5003		CMP	0.013					AQUASHIELD	AQUA-FILTER	AF-8	SIZED AS PART OF EAST JACKSON STREETS EFFORT
	5004		CMP	0.013					AQUASHIELD	AQUA-FILTER	AF-9	SIZED AS PART OF EAST JACKSON STREETS EFFORT
	5005		CMP	0.013					AQUASHIELD	AQUA-FILTER	AF-6	SIZED AS PART OF EAST JACKSON STREETS EFFORT
	5006		CMP	0.013					AQUASHIELD	AQUA-GUARD	AG-18	SMALL TRIBUTARY AREA
CACHE CREEK DRIVE	5007	12"	CMP	0.013	35.7	0.0192	0.139	4.96	AQUASHIELD	AQUA-FILTER	AF-6	SIZED FOR CAPACITY OF EXISTING OUTLET PIPE
WILLOW STREET	5008	24"	CMP	0.013	226	0.0024	0.049	11.07	AQUASHIELD	AQUA-FILTER	AF-8	SIZED FOR CAPACITY OF EXISTING INLET PIPE
LOWER CACHE CREEK DRAINAGEWAY (MULTI-AGENCY CAMPUS)	5009								AQUASHIELD	AQUA-GUARD	AG-18	SMALL TRIBUTARY AREA
	5010								AQUASHIELD	AQUA-GUARD	AG-18	SMALL TRIBUTARY AREA
	5011								AQUASHIELD	AQUA-GUARD	AG-18	SMALL TRIBUTARY AREA
	5012	21"	PVC	0.01	206	0.00144	0.038	7.83	AQUASHIELD	AQUA-FILTER	AF-7	SIZED FOR CAPACITY OF EXISTING INLET PIPE
NORTH MILLWARD STREET	5013								AQUASHIELD	AQUA-GUARD	AG-18	SMALL TRIBUTARY AREA, LITTLE CLEARANCE
	5014								AQUASHIELD	AQUA-GUARD	TWO @ AG-18	SMALL TRIBUTARY AREA, LITTLE CLEARANCE
	5015								AQUASHIELD	AQUA-GUARD	AG-18	SMALL TRIBUTARY AREA, LITTLE CLEARANCE
WEST BROADWAY AVENUE ENHANCEMENTS	5016	18"	CMP	0.013	105	0.00969	0.098	10.29	AQUASHIELD	AQUA-FILTER	AF-8	SIZED FOR CAPACITY OF EXISTING INLET PIPE
OLD ALBERTSONS	5017	6"							AQUASHIELD	AQUA-FILTER	AF-4.5	LARGE PARKING AREA
CACHE CREEK DIVERSION	5018	18"	CMP	0.013	105	0.014	0.118	12.39	AQUASHIELD	AQUA-FILTER	AF-4.5	RELATIVELY SMALL TRIBUTARY AREA
	5019								AQUASHIELD	AQUA-FILTER	AF-4.5	RELATIVELY SMALL TRIBUTARY AREA
	5020	30"	CMP	0.013	410	0.0025	0.05	20.5	AQUASHIELD	AQUA-FILTER	TWO @ AF-8 (IN PARALLEL)	SIZED FOR CAPACITY OF EXISTING INLET PIPE
	5021								AQUASHIELD	AQUA-FILTER	AF-4.5	RELATIVELY SMALL TRIBUTARY AREA
	5022								AQUASHIELD	AQUA-FILTER	AF-4.5	RELATIVELY SMALL TRIBUTARY AREA
	5023								AQUASHIELD	AQUA-FILTER	AF-4.5	RELATIVELY SMALL TRIBUTARY AREA
	5024								AQUASHIELD	AQUA-FILTER	AF-4.5	RELATIVELY SMALL TRIBUTARY AREA
SOUTH GLENWOOD STREET	5025	18"	CMP	0.013	105	0.0056	0.075	7.88	AQUASHIELD	AQUA-FILTER	AF-7	SIZED FOR CAPACITY OF EXISTING INLET PIPE
PINE DRIVE	5026								AQUASHIELD	AQUA-FILTER	AF-4.5	RELATIVELY SMALL TRIBUTARY AREA
UPPER SNOW KING AVENUE	5027	36"	CMP	0.013	666	0.01	0.1	66.6	AQUASHIELD	AQUA-FILTER	TWO @ AF-9 (IN PARALLEL)	SIZED FOR 2-YEAR STORM (38% OF 100-YEAR STORM)
FLAT CREEK DRIVE	5028								AQUASHIELD	AQUA-GUARD	AG-18	SMALL TRIBUTARY AREA
	5029								AQUASHIELD	AQUA-GUARD	AG-18	SMALL TRIBUTARY AREA
LOWER SNOW KING AVENUE	5030								AQUASHIELD	AQUA-GUARD	AG-18	SMALL TRIBUTARY AREA
	5031								AQUASHIELD	AQUA-GUARD	AG-18	SMALL TRIBUTARY AREA
	5032								AQUASHIELD	AQUA-GUARD	AG-18	SMALL TRIBUTARY AREA
	5033								AQUASHIELD	AQUA-GUARD	AG-18	SMALL TRIBUTARY AREA
SCOTT LANE	5034	30"	CMP	0.013	410	0.004	0.063	25.83	AQUASHIELD	AQUA-FILTER	TWO @ AF-8 (IN PARALLEL)	SIZED FOR 2-YEAR STORM (38% OF 100-YEAR STORM)
DOGWOOD DRIVE	5035								AQUASHIELD	AQUA-GUARD	AG-18	SMALL TRIBUTARY AREA
POWDERHORN LANE	5036	27" X 42"	HE-CMP	0.013	560	0.001	0.032	17.92	AQUASHIELD	AQUA-FILTER	TWO @ AF-8 (IN PARALLEL)	SIZED FOR CAPACITY OF EXISTING INLET PIPE
HIGHWAY 89	5037	54"	CMP	0.013	1967	0.002	0.045	88.52	AQUASHIELD	AQUA-FILTER	TWO @ AF-9 (IN PARALLEL)	SIZED FOR 2-YEAR STORM (38% OF 100-YEAR STORM)
GREGORY LANE	5038	24"	CMP	0.013	226	0.001	0.032	7.232	AQUASHIELD	AQUA-FILTER	AF-7	SIZED FOR CAPACITY OF INLET PIPE (CONCEPTUAL)
NELSON DRIVE	5039								AQUASHIELD	AQUA-FILTER	AF-9	SIZED AS PART OF EAST JACKSON STREETS EFFORT

We don't have individual units, but all of this drainage is treated at Karns Meadow Treatment Wetland

Attachment B: Flat Creek Watershed Management Plan (Teton Conservation District, 2006)

Stormwater related initiatives/recommendations set forth by this guiding document are listed below. The status of each recommendation is noted, current as of February 2019, along with a proposed next step.

Existing Programs

Refer to the following **Table 5. Existing Watershed Improvement and Protection Programs**, page 3 of this document (excerpted from the Management Plan: page 24, PDF page 31)

Status: All programs have been implemented by all responsible parties listed.

Current recommended action: Continue to implement ongoing programs that continue to prove their value with regard to pollution reduction and/or water quality improvements.

Flat Creek Management Practices

Refer to the following **Table 6. Management Practices and Policies to Improve and Protect Flat Creek**, page 4 of this document (excerpted from the Management Plan: page 29, PDF page 36)

Status: Town has implemented some practices but not all, as shown on this table. A green circle indicates implemented, an orange circle indicates some work has been done, a red square indicates not. Note that only items for which the Town is a responsible organization are marked; some items for which entities other than Town are responsible have been completed but are not marked.

Teton Conservation District (TCD) is in the process of updating this Plan. TCD also held a stakeholder meeting including Town representatives, where they collected ideas for management practices, planning, and monitoring. This list of ideas still needs to be vetted further by staff and among decision makers.

Current recommended action: Continue to coordinate with TCD and other stakeholders as appropriate to complete the updated Plan and develop an implementation strategy.

Implementation Plans

Refer to the following tables (excerpted from the Management Plan: pages 31-36, PDF pages 38-43):

Table 7. Implementation Plan Table for Water Quality Goal, starting on page 5 of this document

Table 8. Implementation Plan Table for Riparian Habitat Goal, starting on page 8 of this document

Table 9. Implementation Plan Table for Aquatic Habitat Goal, starting on page 10 of this document

Status: Town has implemented some practices but not all, as shown on these tables. A green circle indicates implemented, an orange circle indicates some work has been done, a red square indicates not. Note that only items for which the Town is a responsible organization are marked; some items for which entities other than Town are responsible have been completed but are not marked.

Teton Conservation District (TCD) is in the process of updating this Plan. TCD also held a stakeholder meeting including Town representatives, where they collected ideas for management practices, planning, and monitoring. This list still needs to be vetted further by staff and among decision makers.

Current recommended action: Continue to coordinate with TCD and other stakeholders as appropriate to complete the updated Plan and develop an implementation strategy.

STATUS: To current staff knowledge, all of these have been implemented.

TABLE 5. EXISTING WATERSHED IMPROVEMENT AND PROTECTION PROGRAMS

Stakeholder		Exisiting Program or Policy	Pollutant or Issue Addressed
Town of Jackson	1	Eleven stormwater treatment vault systems installed	Sediment, oil and litter
	2	Stormwater and snowmelt filter system installed at Rodeo Grounds/Snow storage	Sediment and litter
	3	Street sweeping	
	4	Soil erosion and sediment controls and stormwater retention requirements on new development	Sediment and stormflow
	5	Stormwater collection system improvements	
	6	Creek setbacks for development	Habitat Degradation
	7	Landscaping standards in creek setback	
	8	Stream habitat enhancements in Town	
	9	Environmentally friendly sanding salts	Salts
	10	Acquired land for stormwater wetland	Sediment, oil, nutrients, salts, metals, litter and habitat
	11	Contracted feasibility for Karns Meadow stormwater treatment wetland	Sediment, oil, nutrients, salts, metals, litter and habitat
Teton County	12	Soil erosion and sediment controls and stormwater retention requirements on new development	Sediment and stormflow
	13	Creek setbacks for development	Habitat Degradation
	14	Landscaping standards in creek setback	
	15	Impervious surface limitations for new development	Stormflow
	16	Snow storage regulations	Sediment, oil and litter
	17	Open Space standards for new development	All
Teton Conservation District	18	Ongoing monitoring of water quality in Flat Creek	Nutrients, sediment, salts
	19	Ongoing habitat and aquatic invertebrate monitoring in Flat Creek	Habitat and aquatic life degradation
	20	Partnered with town on eleven stormwater treatment vault system	Sediment, oil and litter
	21	Partnered with town on stream habitat enhancements in Town	Habitat Degradation
	22	Produced Rural Living Handbook fo local landowners	All
	23	Watershed education events for adults, children and professionals	
	24	Partnered with town on stormwater and snowmelt filter system at Rodeo Grounds/Snow storage	Sediment and litter
	25	Partnered with town feasibility for Karns Meadow stormwater treatment wetland	Sediment, oil, nutrients, salts, metals, litter and habitat
	26	Draft Stormwater Pollution Prevention Plan guidance document	Sediment and stormflow
Wyoming Department of Transportation	27	Street sweeping	Sediment and litter
	28	Soil erosion and sediment controls and stormwater retention requirements on new development	Sediment and stormflow
Bridger-Teton National Forest	29	Trail maintenance and erosion control	Sediment
	30	Forest Plan - Water quality and habitat protection goals and standards	All
Wyoming Game and Fish	31	Stream habitat enhancements on Elk Refuges and Jackson (TU)	Habitat Degradation
	32	Education	Habitat and Fish
Public	33	Stream habitat enhancements on Elk Refuges and Jackson (TU)	Habitat Degradation
	34	Creek litter cleanups by numerous organizations	Litter
	35	Pet waste program at parks and trailheads(PAWS)	Nutirients and bacteria
	36	Facilitated numerous conservation easements (JHLT)	Riparian Habitat, others

TABLE 6. MANAGEMENT PRACTICES AND POLICIES TO IMPROVE AND PROTECT FLAT CREEK

	Structural Management Practices	Plan Goal	Responsible Organization
1	Construct stormwater treatment wetland and wildlife habitat enhancements on Karns Meadow (IMA, 2005)	WQ RH	Town, TCD, & WYDOT
2	Construct fish and aquatic habitat enhancements in Flat Creek within the Town of Jackson (Biota, 1996 and Habitech, 2003)	AH	Town, WGFD & TCD
3	Perform maintenance and improvements to stormwater collection system – *Priorities identified are Cache Creek and Kelly Tube* (Nelson Eng., 1996)	WQ	Town
4	Install stormwater treatment vault systems as part of stormwater infrastructure Capital Improvement Projects in Town of Jackson (Nelson Eng., 1996)	WQ	Town & TCD
5	Restore and protect riparian habitat on agricultural land and residential properties along Flat Creek and Cache Creek by providing incentives to landowners and sudivisions	RH	TCD
6	Construct stormwater runoff and erosion control improvements on Cache Creek Road and nearby eroding trails on the National Forest (Simon, 2006)	WQ RH	USFS
7	Maintain and clean eleven existing stormwater treatment vault systems in the Town of Jackson	WQ	Town & TCD
	Non-Structural Management Practices	**Plan Goal**	**Responsible Organization**
8	Enhance existing street sweeping operations in Town and state highways by utilizing improved road traction sanding and sweeping methods and increasing sand removal during winter and early spring months (MSU, 2004)	WQ	Town & WYDOT
9	Review Town of Jackson LDR, Division 3200 - landscaping in stream buffers, setbacks for irrigation ditches, etc.	RH	Town
10	Enforcement of garbage control ordinances and provide garbage storage solutions for commercial businesses to reduce litter in the creek and storm drains in the Town of Jackson and to the south	WQ	TCD & Town
11	Mail educational flyers to residents in watershed with watershed protection related LDR and ordinance information and residential non-point source pollution topics	All	Town & TCD
12	Perform inspections and enforcement of watershed protection related LDRs – *stream setbacks, landscaping, grading and erosion control*	All	Town & TCD
13	Draft and adopt Teton County Water Quality LDR	WQ	County & TCD
14	Perform inspections and enforcement of Teton County watershed protection LDRs – *stream setbacks, grading and erosion control, etc*	All	County & TCD
15	Finalize Stormwater Pollution Prevention Plan guidance document – *erosion control practices and guidance for construction sites*	WQ	TCD
16	Increase awareness on domestic pet and livestock waste management techniques and incentive programs	WQ	TCD
17	Facilitate conservation easements and stewardship programs along Flat Creek and tributaries	All	Land Trust Organization
	Administration and Monitoring	**Plan Goal**	**Responsible Organization**
18	Administer Implementation of Watershed Management Plan	All	TCD
19	Estimate sediment loading to creeks from stormwater discharges and total sediment loads in Flat Creek	WQ	TCD
20	Continue annual monitoring of water quality, habitat quality and aquatic invertebrates in Flat Creek	WQ	TCD
21	Implement water quality and habitat quality monitoring related to Watershed Management Plan	All	TCD
22	Implement Information and Education Activities related to Watershed Management Plan	All	TCD

LDR – Land Development Regulations, WQ – Water Quality, RH - Riparian Habitat, AH – Aquatic Habitat

TABLE 7. IMPLEMENTATION PLAN TABLE FOR WATER QUALITY GOAL

Goal 1 Water Quality: Restore water quality in Flat Creek to meet designated uses for the waterbody

Objective 1: Reduce TSS and turbidity in Flat Creek caused by stormwater runoff by 25%
Objective 2: Educate public on urban and residential stormwater runoff pollutants
Objective 3: Enforce water quality protection Land Development Regulations and Ordinances

Management Practice	Responsible Party	Estimated Cost	Funding Mechanism	Indicators	Milestones			Reference
STRUCTURAL					**<1 year**	**<3 years**	**<10years**	
#1 Construct stormwater treatment wetland and wildlife habitat enhancements on Karns Meadow	Town of Jackson, WYDOT & TCD	$750,000	Section 319, TCD and Town general funds, DU, TU, NRCS	# acres wetland constructed # acres flowing to wetland %TSS removal		7 550 70		IMA, 2005
#1a *Information & Education Activities* Hold informational open house, construct kiosks and facilitate field trips	TCD	$20,000	TCD general funds	# Open Houses # Kiosks # Field trips	1 0 1	 4 2		
#2 Perform maintenance and improvements to stormwater collection system – Priorities identified are Cache Creek and Kelly Tube	Town of Jackson & TCD	$200,000	Section 319, TCD and Town general funds	# miles of creek and pipe maintained #sediment catch basins installed		5 5	5 10	Nelson Eng, 2001
#2a *Information & Education Activities* Educational pamphlet in Town of Jackson water bill, newspaper informational public notice	Town of Jackson	$1,000	Section 319, TCD and Town general funds	# pamphlets mailed # public notices		300	1000 2	
#3 Install stormwater treatment vault systems as part of stormwater infrastructure Capital Improvement Projects in Town of Jackson	Town of Jackson & TCD	$75,000/yr	Section 319, TCD and Town general funds	# vaults	1	2	5	Nelson Eng, 2001
#3a *Information & Education Activities* Stormwater drain and vault "no dumping" plaques	TCD	$1,000	Section 319, TCD funds	#plaques	2	4	8	
#4 Construct stormwater runoff and erosion control improvements on Cache Creek Road and nearby eroding trails on the National Forest	USFS	$50,000	USFS general funds and USDA grant	# miles of road and trails stabilized		2	3	Simon, 2006
#4a *Information & Education Activities* Construct signage and facilitate field trips	USFS	$1,000	USFS general funds and grant	# Signs # Field trips		4 1		
#5 Maintain and clean eleven existing stormwater treatment vault systems in the Town of Jackson	Town of Jackson & TCD	$20,000/yr	Section 319, TCD and Town general funds	# vaults maintained and cleaned	11	12	18	
#5a *Information & Education Activities* Stormwater drain and vault stenciling	TCD	$1,000	Section 319, TCD funds	#signs		10	40	

Table 7 continued Management Practice	Responsible Party	Estimated Cost	Funding Mechanism	Indicators	Milestones			Reference
NON-STRUCTURAL					**<1 year**	**<3 years**	**<10years**	
#6 Enhance existing street sweeping operations in Town and state highways by utilizing improved road traction sanding and sweeping methods and increasing sand removal during winter and early spring	Town of Jackson & WYDOT	$50,000/yr	Town and WYDOT general funds	# additional days operating # additional miles swept # additional tons collected	20 50 1	30 100 5	60 300 40	AKDOT, 2003; MSU, 2004; Wheaton, 2003
#6a *Information & Education Activities* None								
#7 Enforcement of garbage control ordinances and promote garbage storage solutions for commercial businesses to reduce litter in the creek and storm drains in the Town of Jackson and to the south	Town of Jackson & TCD	$20,000	TCD and Town general funds	# garbage containment facilities constructed	2	2	2	
#7a *Information & Education Activities* Personal communication and education for businesses along Flat Creek	Town of Jackson & TCD	$500	TCD and Town general funds	# businesses contacted	5	5	5	
#8 Draft and adopt Teton County Water Quality LDR	Teton County & TCD	$25,000	TCD and County general funds	LDR Adopted		1		
#8a *Information & Education Activities* Develop and mail educational flyers to landowners with information on watershed protection LDRs and ordinances, residential non-point source pollution topics	TCD, Teton County, Town	$10,000	TCD, Town and Teton County general funds	# brochures		5000	10,000	
#9 Finalize Stormwater Pollution Prevention Plan guidance document – erosion control practices and guidance for construction sites	TCD	$20,000	TCD general funds	Completed document	1			
#9a *Information & Education Activities* Provide document to professionals	TCD	$10,000	TCD general funds	# documents	50	200	200	
#10 Increase awareness on domestic pet and livestock waste management techniques and incentive programs	TCD, NRCS	$10,000	TCD general funds, NRCS grants, other	# residents contacted	50	100	100	
#10a *Information & Education Activities* Mail educational and assistance pamphlet	TCD, NRCS	$2,000	TCD general funds	# pamphlets mailed		1000		
#11 Perform inspections and enforcement of watershed protection related LDRs – *stream setbacks, landscaping, grading and erosion control*	TCD, Town of Jackson, Teton County	$40,000/yr	TCD, Town and County general funds, development fees	# properties and construction sites inspected	50	100	100	
#11a *Information & Education Activities* Provide information pamphlet to landowner and developers	TCD, Town of Jackson, Teton County	$5,000	TCD, Town and County general funds, development fees	# contacts and pamphlets	100	300	300	

Table 7 continued **Management Practice**	**Responsible Party**	**Estimated Cost**	**Funding Mechanism**	**Indicators**	**Milestones**			**Reference**
MONITORING					**<1 year**	**<3 years**	**<10years**	
#12 Estimate sediment loading to creeks from stormwater discharges and total sediment loads in Flat Creek	TCD	$20,000	Section 319, TCD general funds	TSS TDS Flow				Nelson 1996, 2001 IMA 2005
#13 Continue annual and storm event water quality monitoring	TCD	$30,000/yr	Section 319, TCD general funds	WQ parameters	Observe trends			
#14 Monitor TSS and Turbidity to determine effectiveness of management practices	TCD	$20,000	Section 319, TCD general funds	% TSS and turbidity reduction	5	10	25	Winer 2000

TABLE 8. IMPLEMENTATION PLAN TABLE FOR RIPARIAN HABITAT GOAL

Goal 2 Riparian Habitat: Protect and restore riparian habitat along Flat Creek and its tributaries

Objective 1: Adopt regulations restricting disturbances of native riparian vegetation along Flat Creek
Objective 2: Revegetate and restore riparian habitat along bike paths and south of town

Management Practice	Responsible Party	Estimated Cost	Funding Mechanism	Indicators	Milestones			Reference
STRUCTURAL					**<1 year**	**<3 years**	**<10 years**	
#1 Construct riparian habitat enhancements where appropriate within the stormwater treatment wetland area on Karns Meadow	See Table 7 #1							IMA, 2005
#1a *Information & Education Activities* See Table 7 #1								
#2 Restore and protect riparian habitat on agricultural land and other private property along Flat Creek and Cache Creek by providing incentives to landowners and sudivisions	TCD	$200,000	NRCS, WY Wildlife Fund, USDA CRP Programs, other local non-profit grants	# stream miles of creek restored		1	3	
#2a *Information & Education Activities* Facilitate educational workshops for landowners, involve local youth organizations in restoration projects	TCD	$1,000	TCD general funds	# workshops # youth days		1 2	1 2	
#3 Include riparian habitat restoration in improvements on Cache Creek Road and nearby eroding trails on the National Forest	See Table 7 #4							
#3a *Information & Education Activities* See Table 7 #4								
NON-STRUCTURAL								
#4 Review Town of Jackson LDR, Division 3200 - landscaping in stream buffers, setbacks for irrigation ditches, etc. Determine if revisions or additions are appropriate and consistent with watershed goals.	Town of Jackson	$2,000	Town general funds	LDR review	1			
#4a *Information & Education Activities* Educational pamphlet mailed to landowners	Town of Jackson	$1,000	Town general funds	# pamphlets		2000	2000	
#5 Facilitate conservation easements and stewardship programs along Flat Creek and tributaries – approximately 120 acres	JHLT	Unknown	Conservation buyer, private landowner, or partnership	# acres put under conservation easement	30	50	40	Segerstrom, 2006
#5a *Information & Education Activities* None								

Table 8 continued **Management Practice**	**Responsible Party**	**Estimated Cost**	**Funding Mechanism**	**Indicators**	**Milestones**			**Reference**
					<1 year	**<3 years**	**<10 years**	
#6 Investigate impacts to fish and wildlife by recreational float tubers on Flat Creek. Involve float tubers in process.	TCD, Town of Jackson, private landowners	$1,000	TCD and Town general funds	# field surveys and observations # float tubers involved	1 5	1 20		
#6a *Information & Education Activities* Educate recreational float tubers on impacts to fish and wildlife and private property rights.	TCD, Town of Jackson, private landowners	$1,000	TCD and Town general funds	# educational signs at potential access points # float tubers educated on impacts		6 100		
#7 Provide a voluntary water use analysis to water users along Flat Creek	TCD, WGFD, State Engineer	Unknown	NRCS Technical Support	# voluntary water use analysis	1	5	10	
#7a *Information & Education Activities* Educate water users on water conservation techniques and private land owners on water right law	TCD, WGFD, State Engineer	Unknown	TCD general funds	# water users and landowners educated	5	20	50	
#8 Review proposed recreational easements and pathways planned near waterbodies and determine if they pose negative impacts to fish and wildlife habitat	TCD, Town and Teton County	Unknown	TCD, Town and Teton County general funds	Review as necessary				
#8a *Information & Education Activities* Present findings and analysis to appropriate planning organization	TCD, Town and Teton County	Unknown	TCD, Town and Teton County general funds					
MONITORING								
#9 Continue annual riparian habitat quality monitoring	TCD	$5,000/yr	TCD general funds	Habitat quality parameters	Observe trends			
#10 Monitor habitat quality to determine effectiveness of management practices	TCD	$5,000	Section 319, TCD general funds	% plant survival		75	75	

TABLE 9. IMPLEMENTATION PLAN TABLE FOR AQUATIC HABITAT GOAL

Goal 3 Aquatic Habitat: Improve aquatic habitat in Flat Creek to maintain native trout populations

Objective 1: Enhance adult, juvenile, and spawning trout habitat in Flat Creek in Town and "south of town"

Management Practice	Responsible Party	Estimated Cost	Funding Mechanism	Indicators	Milestones			Reference
STRUCTURAL					**<1 year**	**<3 years**	**<10 years**	
#1 Construct and monitor fish and aquatic habitat enhancements in Flat Creek within the Town of Jackson	WGFD, TCD and Town of Jackson	$300,000	TCD, WGFD and Town general funds, local non-profits, landowners	# miles of enhanced creek Monitor enhancement function and fish populations	1	1		Biota, 1996 Habitech, 2003
#1a *Information & Education Activities* Hold informational open house, construct kiosks and facilitate field trips	WGFD, TCD and Town of Jackson	$3,000	TCD, WGFD and Town general funds, local non-profits	# open houses # kiosks # field trips	1 2 1	1 2 1		
Management Practice	**Responsible Party**	**Estimated Cost**	**Funding Mechanism**	**Indicators**	**Milestones**			**Reference**
NON-STRUCTURAL					**<1 year**	**<3 years**	**<10 years**	
#2 Identify potential sections of Flat Creek south of town for fish habitat enhancements	TCD	$2,000	TCD general funds and local non-profits	Creek miles inventoried	2	5		
#2a *Information & Education Activities* Outreach to landowners on incentive programs and benefits of enhancements	TCD	$1,000	TCD general funds	# landowners contacted	10	20		
MONITORING								
#4 Continue annual aquatic habitat quality monitoring	TCD	$5,000/yr	TCD general funds	Habitat quality parameters	Observe trends			
#5 Monitor aquatic habitat quality to determine effectiveness of management practices	TCD	$5,000	TCD general funds	Pool to riffle ratio Width to depth ratio Redd counts	Before and after			

Attachment C: Comprehensive Plan (Jackson/Teton County, 2012)

Stormwater related principles and policies set forth by this guiding document are listed below. The status of each recommendation is noted, current as of February 2019, along with a proposed next step.

Common Value #1 – Ecosystem Stewardship

Section 1. Stewardship of Wildlife, Natural Resources and Scenery

Principle 1.1 – Maintain healthy populations of all native species

- Policy 1.1.a: Protect focal species habitat based on relative critical value

  Status: Town protects habitats of local species such as cutthroat trout through the Natural Resource Overlay (NRO).

  Current recommended action: Continue to utilize and update the NRO.

- Policy 1.1.e: Understand the impacts of development on wildlife and natural resources

  Status: TCD performs water quality monitoring on Cache Creek and Flat Creek. In the spring of 2019, USGS will begin monitoring sediment regimes and contributions from the Town of Jackson in Flat Creek. Wyoming Department of Environmental Quality is informally evaluating existing data to assess impaired listing status of Flat Creek.

  Current recommended action: Continue existing monitoring programs and utilize data collected to make informed decisions about the activities that appear to work well, and those that may need modification. Consider whether enhancing the existing program or developing additional programs may be useful in identifying problems and/or evaluating solutions.

- Policy 1.1.f: Require mitigation of unavoidable impacts to habitat:

  Status: Town has anecdotally identified a few private properties and land use areas that contribute to stream and creek degradation. For certain projects Town has required stormwater impacts mitigation or improvements for project approval, though not directly required by ordinance.

  Current recommended action: Utilize monitoring data to confirm harmful contributions/impacts and assessing improvements resulting from implemented programs.

- Policy 1.1.g: Encourage restoration of degraded areas

  Status: This section of LDRs has not been updated yet. As stated above, there is not requirement, but we have encouraged specific projects or land owners to reduce impacts.

  Current recommended action: Coordinate this work through a mitigation program and the Town's CIP.

Principle 1.2 – Preserve and enhance water and air quality

- Policy 1.2.a: Buffer waterbodies, wetlands, and riparian areas from development

  Status: LDRs currently require buffers for these natural features. 30' wetlands; flat creek north of Hansen 25', south 50'; cache creek 20'

Current recommended action: Update this section of LDRs, either on our own or after County completes their LDR updates.

- Policy 1.2.b: Require filtration of runoff

  Status: The LDRs require that if development will result in a change in the quality of runoff, provide treatment.

  Current recommended action: Clarify the LDRs to provide a performance goal for the treatment (e.g. equivalent to existing condition). Ensure we consider the goals of the Comp Plan: promote innovative stormwater and snowmelt collection, storage, and diversion systems to reduce the amount of sediment and pollution entering our local water bodies

- Policy 1.2.c: Monitor and maintain water quality

  Status: TCD performs water quality monitoring on Cache Creek and Flat Creek. Because we do not have specific Federal or State regulations related to pollutant concentrations, we exceed requirements.

  Current recommended action: Continue existing monitoring programs and evolve as needed.

Principle 1.4 – Protect and steward open space

- Policy 1.4.a: Encourage non-development conservation of wildlife habitat

  Status: One goal of this policy is to permanently preserve strategic habitat lands. The Town's purchase of Karns Meadow is the best example of this so far.

  Current recommended action: Consider developing a strategy, plan, and/or targeted goals for open space acquisitions and ecosystem improvements.

- Policy 1.4.d: Establish a funding source for open space

  Status: The Land Trust assisted in the Karns meadow purchase.

  Current recommended action: Identify other public and private funding partners, grants, or other possible funding mechanisms. Coordinate this with the potential new strategy described in the above item.

- Policy 1.4.e: Conserve open space to promote responsible use of public lands

  Status: Again, the Town's purchase of Karns Meadow may be the most appropriate example.

  Current recommended action: Consider developing a program to set aside or identify partnering funds for the thoughtful purchase of lands adjacent to surface waters to prevent development along these corridors.

Common Value #2 – Growth Management

Section 3. Responsible Growth Management

Principle 3.1 – Direct growth out of habitat, scenery and open space

- The policies in this Principle largely address new development through limited expansion of existing development and limited use of land near wildlife habitat and scenic viewsheds for resort, commercial, and public/semi-public developments.

  Status: Efforts here overlap significantly with those mentioned in CV#1 above.

  Current recommended action: Consider natural resource and habitat protection as a goal for Town development master plans. Also explore the feasibility of implementing a natural lands purchasing strategy to help prevent overdevelopment in these sensitive areas.

Principle 3.4 – Limit development in naturally hazardous areas

- Policy 3.4.a: Protect development against flooding

  Status: Staff re-wrote the Town permit application to include similar requirements as the county's floodplain development permit. Additionally, Town is engaged with Flat Creek Watershed Improvement District to consider ways to reduce frazile ice and winter flooding.

  Current recommended action: Continue working with these partners, and identify others if appropriate, to address development-related flooding.

Principle 3.5 – Manage local growth with a regional perspective

- Policy 3.5.b: Strive not to export impacts to other jurisdictions in the region

  Status: Town has collaborated with the County and other entities to consider potential impacts from and solutions to stormwater pollution. The plans referenced in this document point to some of these efforts. Treatment units that have been installed or are planned for installation help reduce contamination in stormwater discharges to the surface waters, which helps protect downstream wildlife habitats and communities.

  Current recommended action: Identify ways to reduce pollution sources, and implement programs that place some of the responsibility/partnership with members of the general public whose activities contribute to the pollution.

- Policy 3.5.c: Maintain control over our own community vision

  Status: Town has continuously updated its LDRs and created plans that help meet our community goals. Many of these are stricter than neighboring jurisdictions or State and Federal requirements.

  Current recommended action: Continue to review and update LDRs, particularly related to new stormwater planning efforts. Consider whether these need to occur in tandem, or if current LDR update efforts should continue and then be revisited again after stormwater plans/program updates are established. Establish LDRs and other rules or policies that best suit the Town's needs now and are adaptable for the future.

Section 4. Town as the Heart of the Region – The Central Complete Neighborhood

Principle 4.4 – Enhance civic spaces, social functions, and environmental amenities to make Town a more desirable Complete Neighborhood

- Policy 4.4.d: Enhance natural features in the built environment

  Status: Town has created walkways, Pathways, and parks at or within sight of Karns Meadow, Flat Creek, and Cache Creek. This enhances these areas by making them accessible amenities within our neighborhoods. Additionally, Town has added signage to better align stream uses on public lands, allowing for greater public access and use. Third, Town has partnered with County and other organizations to create links to adjacent federally-managed lands such as the National Elk Refuge, as well as neighboring forests via Russ Garaman Park and Game Creek.

  Current recommended action: Consider ways to enhance the visitor experience upon entering Jackson from the north and south, by showcasing areas where creeks are visible from the road and Pathways.

Common Value #3 – Quality of Life

Section 6. A Diverse and Balanced Economy

Principle 6.1 – Measure prosperity in natural and economic capital

- Policy 6.1.b: Promote eco-tourism

  Status: Several businesses in town provide access for tourists to our creeks and rivers for energy efficient and low impact enjoyment of these ecosystems including tours, rafting, tubing, kayaking, guided fishing, and other low impact water-based activities. Many of these include some education about our local ecology as part of the adventure.

  Current recommended action: Coordinate with stakeholder groups to include targeted education related to water quality and actions these guests can take to prevent pollution contribution from these and other activities.

- Policy 8.1.a: Maintain current, coordinated plans for delivery of desired service levels

  Status: While Town has not yet established desired levels of service for the local government services listed in this policy, the subject of weed and pest management provides a coordination opportunity.

  Current recommended action: Consider updating or establishing codes or policies related to minimizing use of chemical fertilizers, pesticides, and herbicides, as these can contribute to aquatic and riparian wildlife habitat impacts and reduced water quality.

- Policy 8.2.c: Require mitigation of the impacts of growth on service levels

  Status: While Town has not yet established desired levels of service or formally coordinated capital projects among Town and County for a master 5-year plan, this policy applies to supporting new stormwater infrastructure, LDRs, policies, and initiatives that need to be implemented due to increased growth.

Current recommended action: As described in further detail in Attachment A, establishing a stormwater utility and identifying other funding sources will help alleviate some of the Town's cost burden to construct and maintain infrastructure, review additional regulations for private development permit applications, and continue to implement other stormwater program initiatives such as public education and stakeholder coordination. This can also help prevent higher costs in the future to respond to increased service needs due to growth or increased regulation on surface water discharges and/or pollution contributions.

Flat Creek Blueways Project Report (Snake River Fund, 2018)

Refer to the table of recommended projects/initiatives on the next page of this document (excerpted from the Report: PDF page 8)

Status: Town has implemented some practices but not all, as shown on the table. A green circle indicates implemented, an orange circle indicates some work has been done, a red square indicates not. Note that only items for which the Town is a responsible organization are marked; some items for which entities other than Town are responsible may have been completed but are not marked.

Current recommended action: Continue to identify opportunities and stakeholder partnerships as appropriate.

● Indicates High Impact
● Indicates Impact

Flat Creek Impact Areas

Readiness Factors

Project or Initiative	Habitat	Development	Public Access	Community Identity	Green Infrastructure	Water Quality	Partners	Feasibility	Funding Sources	Relative Cost
1 Flat Creek Overlay	●	●	●	●	●	●	Town of Jackson, Teton County	High	Town of Jackson	$
2 Stormwater Master Plan	○	○		●	●	●	TOJ, TCD	High	SPET, TCD	$$
3 Stormwater Utility	○			○	●	●	TOJ, TCD, TU	High	WYDEQ	$$
4 Flat Creek Forum	●	○	●	●	●	●	TOJ, TCD, TU, WYGFD, FCWID	High	Community Foundation, TCD	$
5 Powderhorn Stormwater	●			○	●	●	TOJ, TCD, WYDEQ	Medium	WYDEQ	$$
6 Plan Re-Engineer Flat Creek	●	○		●	●	○	WYGFD, TCD, TOJ	Medium	Laura Jane Musser Fund, WYGFD, TCD	$$
7 Riparian Buffer	●	○			●	●	TOJ, TCD	Medium	WYDEQ	$$
8 Connect Stormwater to Karns Meadow	●			○	●	●	TOJ, TCD, WYDOT, WYDEQ	Medium	TOJ, TCD, WYDEQ	$
9 Impact Investment	○	●	●	●	○	○	WYGFD, TCD	Medium	Private impact investor, WYDEQ	$$$$
10 Dumpster Enclosure	○		○	●	○	●	Private landowners, Teton Conservation District	High	Community Foundation	$
11 El Tequila	●	●	○	○	○	○	TCD, WYGFD, WYDEQ, TU	Medium	TCD, WYGFD, WYDEQ, TU, Private landowner	$
12 Karns Meadow Park		○	●	●			JHLT, TOJ, Teton County	Low	JHLT	$

TOWN OF JACKSON
WORKSHOP DOCUMENTATION

SUBMITTING DEPARTMENTS:Planning & Legal **PRESENTERS**: Lea Colasuonno & Paul Anthony

WORKSHOP DATE: February 19, 2019

SUBJECT: Small Cell Wireless Facility Regulation Discussion

PURPOSE OF WORKSHOP ITEM

The purpose of this item is to update Council on how new federal regulations will impact local wireless facility siting in the Town and obtain direction from Council on how to proceed with ordinances and standards for managing the development of these facilities within the Town.

DESIRED OUTCOME

The desired outcome is for:

1. Council to understand the implications of the FCC's small cell Order on the Town, specifically the new type of communication facilities that will be applied for because of it and the new regulations staff recommend implementing to handle these types of facilities; and
2. Staff to obtain Council feedback on staff's suggested regulatory approach, specifically the information presented in this staff report and the documents attached hereto.

BACKGROUND/ALTERNATIVES

In recent years the FCC has issued numerous Orders regulating wireless facility development, all of which have severely curtailed local government authority. In 2015 the Town enacted a Land Development Regulation for wireless facilities that addressed the suite of federal regulations up to that point by limiting wireless infrastructure development to specific zones and *prohibiting* it in the Town Right of Way ("ROW").

In 2018 the FCC enacted another Order implementing a variety of new rules that dovetail with the existing federal telecommunication regulations. The relevant portion of the Order that affects "small cell facility" development in the Town takes effect on April 14, 2019. In sum, "small cell facilities" provide cell phone and data services to small targeted areas (e.g., one town block) where peak demand cannot always be met by existing large-scale wireless facilities. By federal definition, each antenna cannot be more than 3 cubic feet in volume and associated wireless equipment cannot be more than 28 cubic feet in volume. In addition, these facilities must be mounted on structures 50' or less in height or on structures no more than 10" taller than adjacent structures. For example, small cell facilities are often be integrated into a standard street light pole. Notably, under the 2018 FCC Order, local governments *may not prohibit* the installation of small cell facilities in the ROW.

To best protect the public's interest in community character and to manage wireless infrastructure development to the public's advantage, the Town needs to update the existing Land Development Regulation and enact new ordinances to address new elements of the 2018 Order.

The Key Features of the 2018 Order:

1. Shotclocks: The Order establishes *additional* mandatory & consequential deadlines.
   - Applications for small wireless facilities must be processed in accordance with new, shorter 60-day and 90-day "shotclock" timelines.

- Once Town staff receives an application, the initial sufficiency determination for small wireless facilities must be sent out to the applicant within ten (10) days;

2. Service Prohibition: The Order defines what it means for the Town to "effectively prohibit" wireless services and establishes *additional* recourse for an applicant if the Town does so.
   - The Order dictates that the Town's failure to meet any "shotclock" deadline means the Town has *per se* "effectively prohibited" wireless development, the contemplated result of which is a court ordering the Town to issue the permit.
3. Fees: The Order requires small cell facility permit fees be "reasonable and cost-based," meaning they are no higher than the fees charged to similarly-situated competitors in similar situations.
4. Aesthetics: The Order adds aesthetic requirements specifically applicable to small cell facilities (distinguished from other wireless facilities).

The Critical Implications for the Town of Each Key Feature:

1. Shotclocks: With the advent of "shotclock" timelines specific to small cell facilities, there are now six (6) different, mandatory & consequential deadlines for Town staff to keep track of that control application timelines for a) "small cell facilities" and b) all other wireless facilities. This patchwork of deadlines does *not* correspond neatly with the Town's general deadlines for applications in the Land Development Regulations.
2. Service Prohibition: The term "effectively prohibit" wireless services was created by the FCC in previous Orders, however by defining it as a consequence for the Town's failure to meet a "shotclock" deadline the 2018 Order created an additional, separate repercussion, and thus litigation risk, for the Town to manage.
3. Fees: The "reasonable and cost-based" fee standard the 2018 Order mandates specifically for small cell facilities requires the Legal and Planning Departments to thoughtfully plan and integrate the various fees for these facilities.
4. Aesthetics: The additional and specific aesthetic standards for small cell facilities requires the Legal and Planning Departments to develop standards unique to the facilities.

The Overall Implication: In order to protect community character to the maximum extent possible, the Town needs to develop regulations for small cell facilities that dovetail with the Town's existing telecommunication rules and that appreciate the 2018 Order and all of its related federal counterparts.

The Key Regulatory Needs Identified by the Legal and Planning Departments:

1. An Ordinance Regulating Small Cell Facilities in the ROW:
   - ❖ This ordinance would be added to Title 12 Streets and Other Public Places.
   - ❖ This is needed because currently the Town has no regulations for wireless facilities in the ROW.
2. A Franchise Ordinance:
   - ❖ Any company accessing the Town's ROW must enter into a franchise agreement.
   - ❖ Having never permitted wireless facilities in the ROW before, this does not exist, and the Legal Department will need to create a standard template.
3. An Amendment to LDR 6.1.10.D (wireless facilities and related sections).
   - ❖ This is needed to process small cell facility development on private property because Town LDRs are currently silent on this issue. The failure to draft a regulation applicable to private property would leave the Town exposed to unregulated small cell facility development on such property.
4. Licensing for Town-owned Light Poles in the ROW:
   - ❖ Small cell facilities are most commonly placed in the ROW on light poles and, therefore, the Town needs to develop a licensing agreement to protect placement on its own property.
   - ❖ It is noteworthy that the two other options for small call facilities in the ROW are to a) build a new light pole or b) lease space on a Lower Valley Energy light pole or utility pole (town staff has reached out to Lower Valley Energy about this likelihood).

5. Design Guidelines/Standards:
    - ❖ Staff has attached hereto a sample set of guidelines and standards for what can *actually* be constructed in the ROW, i.e. specific design standards for the size, height, volume, look, etc. of any pole paced in the ROW.
    - ❖ These guidelines and standards would be approved by Council to control with specificity the archetypal pole that staff can, in turn, administratively approve for future applications.

COMPREHENSIVE PLAN ALIGNMENT

Comp Plan Section 4. Town as the Heart of the Region - The Central Complete Neighborhood:

- Enabling and optimizing communications in the Town core supports the goal of concentrating development and activity in the Town by "improving the quality of life in Town and the economic stability and service delivery for the entire community."

Section 6. A Diverse and Balanced Economy:

- The Comp Plan envisions "developing a sustainable, vibrant, stable and diversified local economy" with specific goals that include "enhancing tourism as the basis of the economy, encouraging local entrepreneurial opportunities, facilitating viable local businesses, [and] ensuring year-round economic viability." Developing, maintaining and improving wireless communication infrastructure within the Town is fundamental to each of these goals.

Section 7. Multimodal Transportation:

- Alternative transportation, such as rideshare vehicles, bikeshares, and large-scale mass transit, is a critical component of the Comp Plan. These alternative transportation modes all require wireless communication networks, making investment in and improvement of the Town's wireless infrastructure a critical step in achieving this Comp Plan goal.

Section 8. Quality Community Service Provision:

- This Comp Plan section opens with the statement that "life-safety, educational, social, cultural and recreational services [are] central to residents' Quality of Life and a visitor's experience," and specifically highlights the need for "the efficient, timely, and safe delivery of critical utilities and services, such as police, fire protection, emergency medical treatment, and water and sewer services." All of these services rely on wireless communication networks to operate, thus achieving this goal involves increasing the Town's current wireless infrastructure.

STAKEHOLDER ANALYSIS

The stakeholders involved in this issue include the public generally, the business community, and visitors.

FISCAL IMPACT

The foreseeable fiscal impacts of this item are:

- Recurring fees from use of the ROW (annual franchise fees for example).
- Individual permit fees (one-off application fees for example).
- Ongoing legal consultant costs (anticipated on a sporadic basis through April 15, 2019).

STAFF IMPACT

Current Staff Impact:

The staff impact of this item falls mostly in the Planning and Legal Departments and the Engineering Division. The Planning and Legal Departments are working closely to research the federal law; understand its implications for the community and its interaction with the Town's current regulations; develop the small cell regulations; and draft the necessary ordinances. The current impact of this item in the Planning and Legal Departments is significant.

The Engineering Division is also being consulted on some of the issues above and will be a necessary partner in generating internal staff procedures for processing applications and, a critical partner, in processing the applications and, once approved, the construction projects.

After second reading these ordinances will have a minimal impact in the Town Clerk's office, which includes the preparation of a brief public notice informing the public of each ordinance and the expected date of third reading. The impact of the third reading in the Town Clerk's office is notable in that it requires publishing the full ordinances in the newspaper, updating the Jackson Municipal Code, updating the Town's website, recording the ordinances in the permanent record book, and updating the electronic database.

Ongoing Staff Impact:
After enactment, staff expects long-term impacts in the Planning and Legal Departments and the Engineering Division to include franchise renewal, new application processing, and management of maintenance and repair of the facilities located in the ROW.

LEGAL ISSUES
Ongoing.

ATTACHMENTS
1. An ordinance outline regulating small cell facilities in the Town ROW.
2. Sample Design Guidelines/Standards.

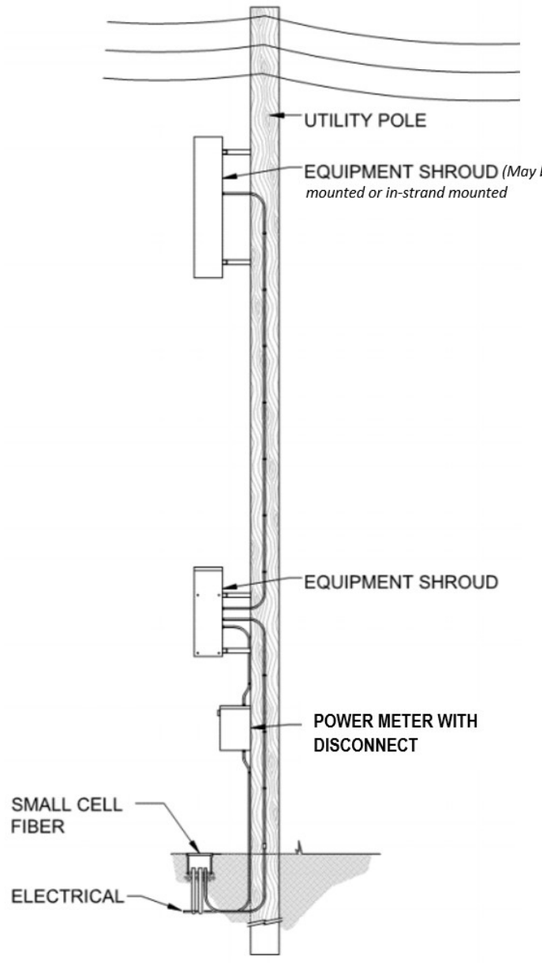
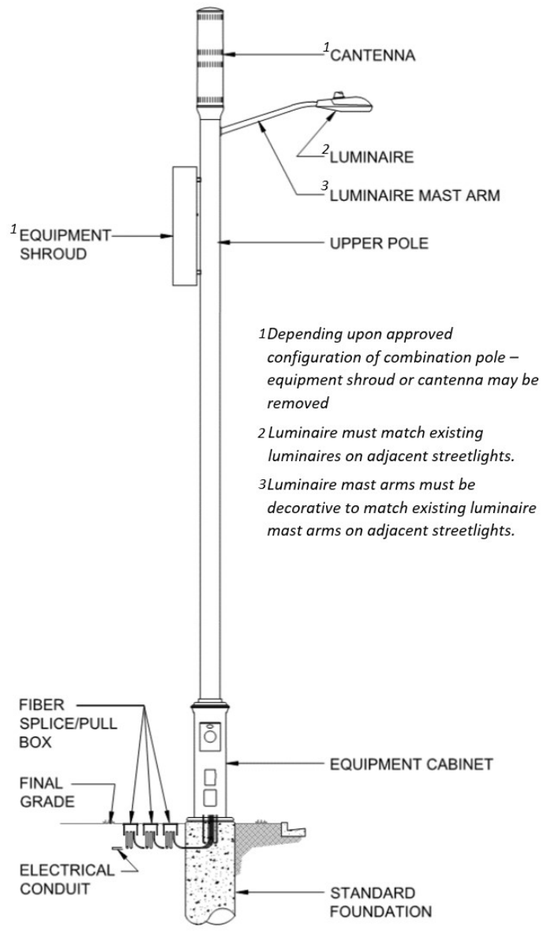
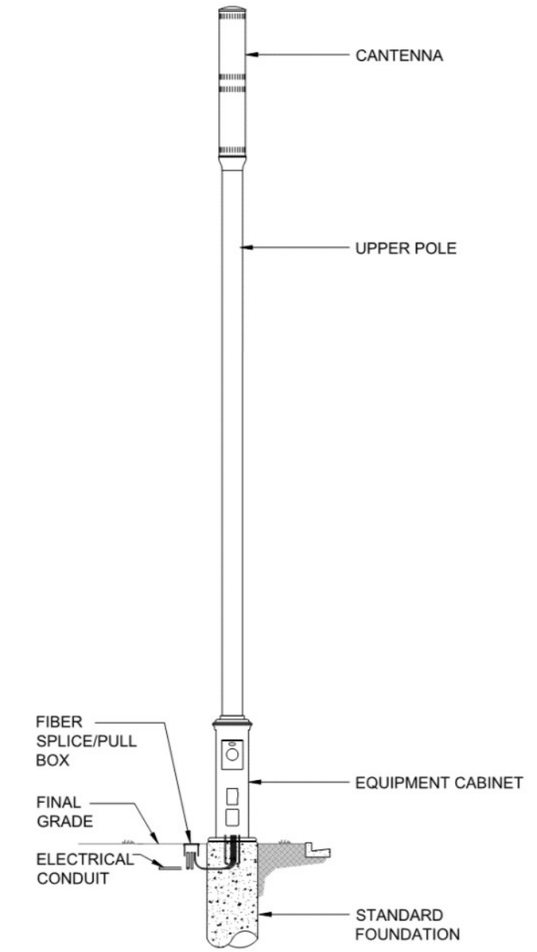
RECOMMENDATION
Staff recommends Council provide policy guidance on the issues herein and direct staff to draft regulations and ordinances to manage small cell wireless applications and the associated development.

SUGGESTED MOTION
I move to direct staff to draft regulations and ordinances to manage small cell wireless applications and the associated development in the Town and present them at a future Council meeting.

South Jordan City

Small Cell Infrastructure Design Guidelines

Three different types of small cell installations are permitted within South Jordan City. These types include attachments to utility poles and utility lines (Type I), removal and replacement of existing streetlights (Type II), and new freestanding installations (Type III). When small wireless facilities are to be constructed in a right-of-way, the city's order of preference for a provider is 1) To install in-strand antennas (Type I), 2) To collocate on existing poles (Type I), 3) To collocate on replacement poles in the same or nearly the same location (Type II),or 3) to collocate on new poles (Type III). Deviations from this guideline shall be approved on a case-by-case basis by South Jordan City Engineer prior to installation.

Section	Type I - Utility Pole Attachment	Type II – Streetlight Replacement (Combination Pole)	Type III – New Freestanding Installation
1. Typical Configuration		 *1 Depending upon approved configuration of combination pole – equipment shroud or cantenna may be removed* *2 Luminaire must match existing luminaires on adjacent streetlights.* *3 Luminaire mast arms must be decorative to match existing luminaire mast arms on adjacent streetlights.*	
2. General Requirements	• All attachments to existing utility poles within South Jordan City right of way require an encroachment permit, prior to installation. • A maximum of three enclosures including the disconnect and antenna shall be installed at each utility pole location. No ground-mounted enclosures, including backup power supply, shall be allowed.	• Combination small cell and streetlight permitting applications and aesthetics shall be approved by South Jordan City prior to installation. All equipment shall meet South Jordan City's Construction Standards and Specifications and comply with the City's Encroachment Permit Requirements.	• All freestanding small cell poles within South Jordan City right of way require an encroachment permit, prior to installation. • The pole design shall match the aesthetics of existing streetlights installed adjacent to the pole. The Carrier shall perform a visual inspection (Online street images are acceptable) prior to submitting a permitting application to determine existing aesthetics.

Section	Type I - Utility Pole Attachment	Type II – Streetlight Replacement (Combination Pole)	Type III – New Freestanding Installation
	• All carrier equipment shall be removed and relocated at no cost to South Jordan City, if South Jordan City decides to underground the utility lines in the future. • No strand-mounted small cell devices shall be installed on poles with mounted streetlights. • Carrier shall submit evidence that the existing poles are appropriately sized and have sufficient strength to accommodate the additional small cell equipment loads. Carrier shall also submit a letter of approval from the pole owner for the small cell equipment to be installed on the specific pole. • Carrier shall certify that radiation is at safe levels by a non-ionizing radiation electromagnetic radiation report (NIER). The NIER report shall be endorsed by a qualified professional. Report shall be submitted to the pole owner and South Jordan City. It shall specify minimum approach distances to the general public as well as electrical and communication workers that are not trained for working in an RF environment (uncontrolled) when accessing the pole by climbing or bucket. • Carrier shall provide a disconnect so pole owners have the ability to easily shut off radio signals and power while working on the pole.	• The same small cell pole aesthetic is to be used to match existing streetlights in the area and maintain a cohesive appearance. The Carrier shall perform a visual inspection (online street images are acceptable) prior to submitting a permitting application to determine existing aesthetics. • All small cell carrier equipment shall be housed internal to the pole or hidden behind an exterior shroud. • The small cell components shall be sized to be visually pleasing. For a combination pole to be considered visually pleasing, the transition between the equipment cabinet and upper pole should be considered. A decorative transition shall be installed over the equipment cabinet upper bolts, or decorative base cover shall be installed to match the equipment cabinet size. • Each pole component shall be architecturally compatible to create a cohesive aesthetic. • Three variations of Type II streetlight replacements will be considered for installation: Type IIa: Streetlight with a single cantenna Type IIb: Streetlight with a single equipment shroud Type IIc: Streetlight with a cantenna and single exterior equipment shroud • Type IIc installation will be allowed when multiple technologies offered by the same carrier are installed on a single pole and to qualify, the Network Provider must demonstrate that the additional technology cannot be integrated into the equipment cabinet or the cantenna. • All pole mounted enclosures shall be securely attached with hardware (not strapped). • Carrier shall certify that radiation is at safe levels by a non-ionizing radiation electromagnetic radiation report (NIER). The NIER report shall be endorsed by a qualified professional. Report shall be submitted to the pole owner and South Jordan City. It shall specify minimum approach distances to the general public as well as electrical and communication workers that are not trained for working in an RF environment (uncontrolled) when accessing the pole by climbing or bucket. • Carrier shall provide a disconnect so pole owners have the ability to easily shut off radio signals and power while working on the pole.	• All small cell carrier equipment shall be housed internal to the pole or hidden behind an exterior shroud. • The small cell components shall be sized to be visually pleasing. For a pole to be considered visually pleasing, the transition between the equipment cabinet and upper pole should be considered. A decorative transition shall be installed over the equipment cabinet upper bolts, or decorative base cover shall be installed to match the equipment cabinet size. • Each pole component shall be architecturally compatible to create a cohesive aesthetic. • Carrier shall certify that radiation is at safe levels by a non-ionizing radiation electromagnetic radiation report (NIER). The NIER report shall be endorsed by a qualified professional. Report shall be submitted to South Jordan City and it shall specify minimum approach distances to the general public. • City reserves the right to attach any sign (such as a no parking sign) on a freestanding installation within the right-of-way.
3. Placement Requirements	• Equipment is attached to existing pole. • Don't impede, obstruct or hinder ADA access, pedestrian or vehicular travel	• Poles can either be owned by South Jordan City or the applicant (as approved via Encroachment Permit) • Don't impede, obstruct or hinder ADA access, pedestrian or vehicular travel • Locate in parkstrip (if possible) and in alignment with existing trees, utility poles and streetlights. • Locate equal distance between trees when possible, with a minimum of 15 feet separation. • Provide required clearances from any existing utilities • Locate outside of 30 foot clear vision triangle at intersections.	• No freestanding poles closer than 250 feet away, radially, from another freestanding small cell pole. • Do not locate along the frontage of a Historic building, deemed historic on a federal, state, or local level. • Locate so as not to significantly create a new obstruction to property sight lines. • Locate between property lines as much as possible • For commercial areas - care should be taken to locate the small cell such that it does not negatively impact a business. Small cells shall not be

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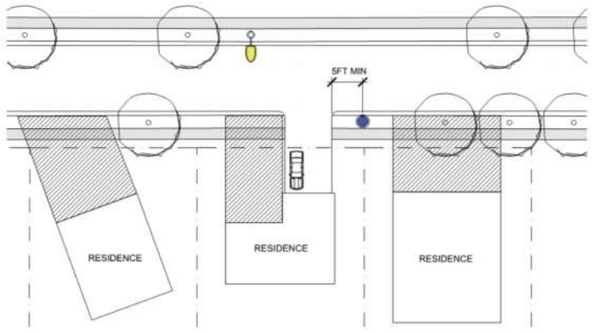
		• Do not obstruct sight distance at driveways or other accesses on to roadway.	located in-front of store front windows, primary walkways, primary entrances or exits, or in such a way that would impede deliveries. • Don't impede, obstruct or hinder ADA access, pedestrian or vehicular travel • Locate in parkstrip (if possible) and in alignment with existing trees, utility poles and streetlights. • Locate equal distance between trees when possible, with a minimum of 15 feet separation. • Provide required clearances from any existing utilities • Locate outside of 30 foot clear vision triangle at intersections. • Do not obstruct sight distance at driveways or other accesses on to roadway. • Freestanding installations are not allowed within a right-of-way that is 60 feet wide or less and adjacent to residential. • Shall not be located within 100 feet of the apron of a fire station or other adjacent emergency service facility. • For residential areas - do not locate within the perpendicular extension of the primary street-facing wall plane, as shown below. Do not locate a small cell in front of driveways, entrances or walkways.  Do not locate small cell in the perpendicular extension of the primary street-facing wall plane Do not locate small cell in front of driveways, entrances, or walkways
4. Equipment Color	• Visible attachments and hardware shall be colored to match pole, or colored gray (7047) if located on a wooden pole.	• Equipment cabinet and pole shall be galvanized in accordance with AASHTO M 111. • The pole is painted to match existing streetlight aesthetics, paint shall be powder coated over zinc paint (Pole and equipment cabinet shall still be galvanized).	• Equipment cabinet and pole shall be galvanized in accordance with AASHTO M 111. • The pole is painted to match existing streetlight aesthetics, paint shall be powder coated over zinc paint (Pole and equipment cabinet shall still be galvanized).
5. Equipment Shroud / Cabinet	• 38"H x 16"W x 12"D maximum for pole-mounted equipment shroud. Strand-mounted equipment enclosures may not exceed 5.5 cubic feet. • All hardware attachments shall be hidden to the maximum extent possible.	• 16 inches (preferred), 20 inches maximum diameter. Maximum height of cabinet is 5'-8". Cabinet to be round and installed below the pole. • If an antenna is located on the side of the pole, the antenna, radio equipment, brackets, and all other hardware required for a complete installation shall fit behind a 38"H x 16"W x 12"D maximum shroud, securely mounted (not strapped) to the pole.	• 16 inches (preferred), 20 inches maximum diameter. Maximum height of cabinet is 5'-8". Cabinet to be round and installed below the pole. • Equipment cabinet and/or equipment cabinet cover shall not have a flat, horizontal surface larger than 1.5 inches. • All hardware attachments shall be hidden to the maximum extent possible.

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		• Equipment cabinet and/or equipment cabinet cover shall not have a flat, horizontal surface larger than 1.5 inches. • All hardware attachments shall be hidden to the maximum extent possible.	
6. Cantenna	• If a cantenna is located on top of the pole the outer diameter shall be 14" maximum and the cantenna shall be no more than 5 feet tall, including antenna, radio head, mounting bracket, and all other hardware necessary for a complete installation. • If the cantenna is mounted to the side of the pole it shall be located inside a shroud of 5.5 cubic feet maximum. The width, depth, or diameter of the shroud size shall not be greater than 16" (maximum).	• The antenna and antenna pole attachment shall be shrouded to meet South Jordan City's aesthetics. A tapered transition between the upper pole and cantenna shall be included. • 14-inch maximum outer diameter x 5' 8"maximum length. Antenna shroud shall be colored to match pole.	
7. Required Equipment	• Only one equipment shroud, containing all required small cell equipment, shall be installed per pole. Except, one additional equipment shroud shall be allowed per pole if the antenna is located within the second equipment shroud. Equipment shall be located such that it meets the Americans with Disabilities Act of 1990 and does not obstruct, impede, or hinder the usual pedestrian or vehicular travel way. • If applicable, only one strand-mount equipment shroud shall be installed per permit location	• All equipment shall be located internal to the equipment cabinet or recessed in the equipment cabinet to meet Utility requirements or hidden behind the cantenna. All equipment shall be mounted per the Owner's requirements. Pole bases shall be sized to handle the listed equipment and all other equipment required by the Owner.	
8. Warning Labels	Carrier shall mark equipment with warning labels if required by NEC or other regulations.		
9. Owner Identification	A 4-inch by 6-inch (maximum) plate with the Carrier's name, location identifying information, and emergency telephone number shall be permanently fixed to the equipment shroud.		
10. Luminaire	*Not Applicable*	Luminaire shall meet South Jordan City's Construction Standards and Specifications and shall match existing luminaires adjacent to permit location.	*Not Applicable*
11. Luminaire Mast Arm	*Not Applicable*	Match mast arms on adjacent streetlights or match aesthetics of adjacent streetlights. In any case, mast arms will be decorative.	*Not Applicable*
12. Pole Size & Type	*Not Applicable*	• Round, straight, galvanized steel. Pole shall be architecturally compatible with the equipment cabinet. At least 15% of the pole design structural capacity shall be reserved for future City IOT installations. • The upper pole shall be scaled to 0.5 to 0.75 times the size of the equipment cabinet with 10" minimum outer diameter. The pole diameter shall be scaled such that no flat, horizontal surface larger than 1.5 inches exists between the equipment cabinet and upper pole.	• Round, straight, galvanized steel. Pole shall be architecturally compatible with the equipment cabinet. • The upper pole shall be scaled to 0.5 to 0.75 times the size of the equipment cabinet with 10" minimum outer diameter. The pole diameter shall be scaled such that no flat, horizontal surface larger than 1.5 inches exists between the equipment cabinet and upper pole.
13. Small Cell Height	• For a utility pole attachment that is located within a right-of-way that is 60 feet wide or less and adjacent to residential – the height of the existing utility pole shall not change. • For commercial or industrial areas or residential areas (within a right-of-way greater than 60 feet wide) - If a cantenna is located on top of the utility pole, the cantenna shall be no more than 5 feet tall, including antenna, radio head, mounting bracket, and all other hardware necessary for a complete installation.	• Pole height shall be measured from the top of the foundation to the top of the highest point on the structure (cantenna or luminaire). • For a streetlight replacement that is located within a right-of-way that is 60 feet wide or less and adjacent to residential – the height of the combination pole may not exceed the height of the existing streetlight pole that is being replaced. • For a streetlight replacement that is located within a right-of-way that is greater than 60 feet wide and adjacent to residential – the height of the combination pole shall not exceed 30 feet. • For commercial or industrial areas - Pole height shall not exceed 40 feet.	• Pole height shall not exceed 30 feet. Pole height shall be measured from the top of the foundation to the top of the cantenna. • Freestanding installations are not allowed within a right-of-way that is 60 feet wide or less and adjacent to residential.

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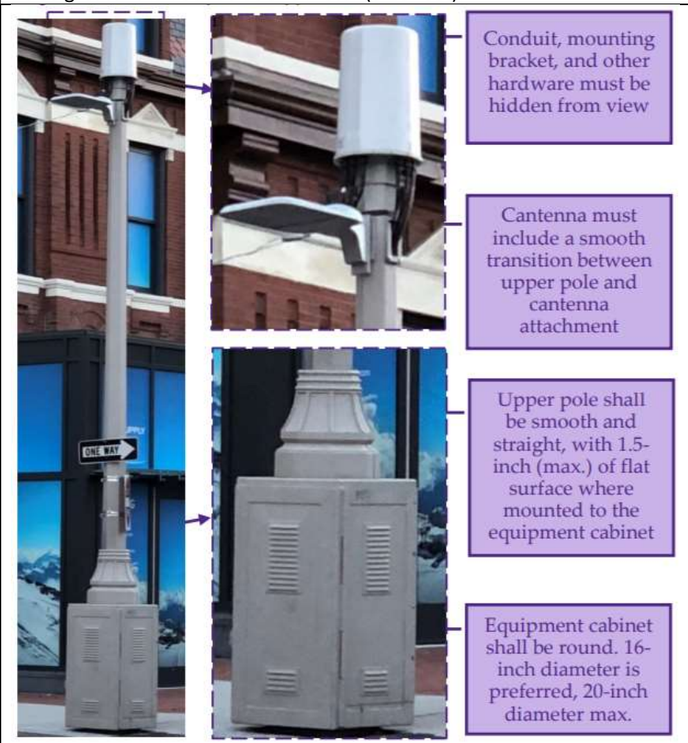
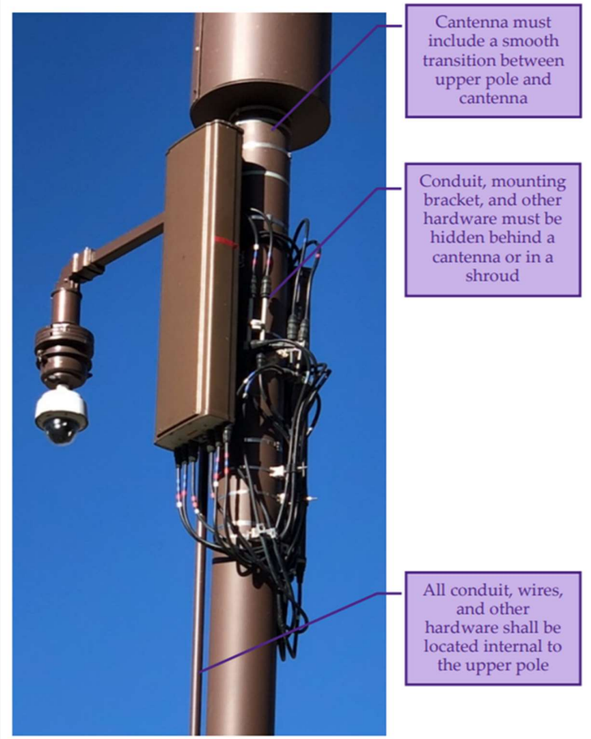
14. Electrical Separation	*Not Applicable*	Separate conduits shall be provided to separate wiring by owner. An internal divider inside the structure shall separate electrical wiring and fiber, per Owner.	Separate conduits shall be provided to separate wiring by owner. An internal divider inside the structure shall separate electrical wiring and fiber, per Owner.
15. Conduit Sweeps in Foundation	*Not Applicable*	Conduit shall accommodate all equipment and include (4) spare 2" PVC sweeps for future service.	
16. Design Wind Velocity	Withstand minimum wind speed of 115mph (3 second gust) – or as required by the City's currently adopted International Building Code.		
17. Foundation	*Not Applicable*	Precast concrete or cast-in-place pole foundations shall be designed per the City standard to meet ACI 318. While the City accepts cast-in-place foundations, precast concrete foundations are preferred and should be installed whenever possible.	
18. Bolt Circle	*Not Applicable*	19.5-inch bolt circle when installing a 16-inch equipment cabinet. 23.5-inch bolt circle when installing a 20-inch equipment cabinet. Anchor bolts shall be hidden from view.	
19. Access Doors	*Not Applicable*	• Lockable doors to be provided as needed in the equipment cabinet to maintain equipment. • A hand hole shall be provided at the top and bottom of the pole to maintain electrical service for streetlights and future IOT attachments.	Lockable doors to be provided as needed in the equipment cabinet to maintain equipment.
20. Ventilation	*Not Applicable*	Passive louvers and/or other passive ventilation systems shall be provided as the primary means of temperature control. If required, fan(s) shall not emit noise greater than 30dBa at one meter (3.28 feet).	
21. Examples of Unacceptable Installations	*Intentionally blank*		

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22. Examples of Acceptable Installations	*Intentionally blank*		

ORDINANCE _____

AN ORDINANCE ADDING (OR AMENDING) _____ REGARDING SMALL WIRELESS COMMUNICATION FACILITY DEVELOPMENT IN THE PUBLIC RIGHT OF WAY; AND PROVIDING FOR AN EFFECTIVE DATE.

NOW, THEREFORE, BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF JACKSON, WYOMING, IN REGULAR SESSION DULY ASSEMBLED THAT:

SECTION I.

Section ____ of Town of Jackson Ordinance No. _____ is hereby added (or amended) to read as follows:

A. Definitions.
    1. "Small Wireless Facility"
    2. "Antenna"
    3. "Collocate"
B. Governance of Deployment in the Public Right of Way.
    1. Franchise Required for Access to Public Right of Way.
    2. Fees and Charges.
        i. Permit Application.
        ii. Franchise Fee.
        iii. Encroachment Permit fee.
        iv. Ongoing ROW use fee.
        v. Other Fees.
    3. Permit Application Requirements.
        i. Applicant's name, address, contact information.
        ii. Names, addresses, contact information of all consultants, if any.
        iii. A description of the proposed work.
        iv. Detailed construction drawings regarding the proposed facility.
        v. To the extent the proposed facility involves Collocation, a structural report.
        vi. Accurate visual depictions or representations.
    4. How a Material Change Affects the Application and Permit Process.
    5. Effect of a Permit.
    6. Administrative Review. Distinguish what is a staff-level review and what requires Council approval.
    7. Design Standards & Guidelines. Adopt by Resolution.
    8. Compliance with Permit.
    9. Map and As-Built Drawings.
C. Bond Required.

SECTION II.

All ordinances and parts of ordinances in conflict with the provisions of this ordinance are hereby repealed.

SECTION III.

If any section, subsection, sentence, clause, phrase or portion of this ordinance is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed as a separate, distinct and independent provision and such holding shall not affect the validity of the remaining portions of the ordinance.

SECTION IV.

This Ordinance shall become effective after its passage, approval and publication.

PASSED 1ST READING THE _____ DAY OF _____, 2019.
PASSED 2ND READING THE _____ DAY OF_____, 2019.
PASSED AND APPROVED THE _____ DAY OF_____, 2019.

TOWN OF JACKSON

BY: _____
Pete Muldoon, Mayor

ATTEST:

BY: _____
Town Clerk, Sandra P. Birdyshaw

ATTESTATION OF TOWN CLERK

STATE OF WYOMING)
) ss.
COUNTY OF TETON)

I hereby certify that the foregoing Ordinance No. _____ was duly published in the Jackson Hole News and Guide, a newspaper of general circulation published in the Town of Jackson, Wyoming, on the _____ day of _____, 2019.

I further certify that the foregoing Ordinance was duly recorded on page _____ of Book _____ of Ordinances of the Town of Jackson, Wyoming.

_____
Town Clerk