

AGENDA ITEM SUMMARY

DATE: February 28, 2011 DEPARTMENT: Public Works DEPT. HEAD SIGNATURE: _____

SUBJECT: Street lighting update

AUTHORITY: ID Code _____ IAR _____ City Ordinance/Code _____
(IF APPLICABLE)

BACKGROUND/SUMMARY OF ALTERNATIVES CONSIDERED:

Idaho Power Owned and Maintained Street Lights: Staff has been working with Idaho Power since the Street Lighting Master Plan was adopted in July 2010. The following highlights what information is known and what steps have been taken to date. (Attached is a copy of the Hailey Street Lighting Master Plan for your reference.)

The current cost to replace non-compliant light fixtures with compliant light fixtures is \$170 a fixture. Idaho Power has reduced this cost to \$105 a fixture, if the replacement occurs during routine annual maintenance of lights. The \$65 savings is achieved by reducing transportation and labor costs, due to the fixtures being replaced during normal scheduled maintenance times. In 2011, there are only 9 lights scheduled for maintenance, which means a total cost of \$945 to replace the non-conforming fixtures with conforming fixtures. This is a savings of \$585 when compared to the lights being replaced during a time other than when the lights are scheduled for maintenance.

During the summer and fall of 2010, Idaho Power formed a committee to research energy efficient street lights, their costs, and whether a separate rate could be created to capture the reduction in energy and maintenance associated with this type of technology. Due to the current cost of \$500 for the materials to install an energy efficient street light, compared to the \$170 for standard high pressure sodium light fixture, the Public Utility Commission (PUC) will not allow Idaho Power to create a reduced rate to incentivize energy efficiency.

The city has worked with Idaho Power to determine if the city could purchase a compliant light fixture that would accommodate energy efficient lights in the future, once Idaho Power has established a new rate for energy efficient lights. There are two main problems associated with this scenario: 1) the type of energy efficient light chosen by Idaho Power in the coming years, may not be compatible with whatever light fixture the city chooses to purchase and install, and 2) Idaho Power has stated that the new energy efficient lighting systems will most likely be manufactured as one system (both the fixture and the light). When a light burns out the entire fixture would be replaced, making any current retrofit with a fixture that will accommodate energy efficient lights in the future superfluous. For these two reasons, Idaho Power has not approved the installment of fixtures, which in the future can be retrofitted with energy efficient lights, on Idaho Power owned light poles.

Idaho Power has elected to revisit the topic in January 2013, in anticipation that, by then, the cost will have decreased in an amount that will increase the financial feasibility to create a new rate and allow Idaho Power to select their lighting material types. Following Idaho Power's reevaluation in 2013, staff plans to coordinate with Idaho Power again to determine if there will be other options available for the city to consider.

City Owned Street Lights, Metered by Idaho Power: These lights are not address by the Hailey Street Lighting Master Plan and are already compliant with the Outdoor Lighting Ordinance. All of these lights are primarily on Main Street with a few on side streets, located off of Main Street. The Hailey Community Climate Challenge provides funds to retrofit all (70) city owned streetlights with energy efficient lights. Because these lights are city owned, the retrofit can occur without Idaho Power's oversight and approval and because they are metered, the estimated cost reduction of 61% will be automatic.

Complaints Regarding Non-compliant Street Lights: To date, the city has coordinated with Idaho Power to replace three (3) non-compliant street lights at the request and expense of residents. Staff suggests that we continue to retrofit lights with compliant fixtures in a manner consistent with Idaho Power's maintenance schedule, in order to achieve the largest cost savings. If residents want a light to be

retrofitted with a compliant fixture prior to Idaho Power's maintenance schedule, the city will continue to coordinate with Idaho Power to replace fixtures at residents' expense.

FISCAL IMPACT / PROJECT FINANCIAL ANALYSIS: Case # _____
Budget Line Item # _____ YTD Line Item Balance \$ _____
Estimated Hours Spent to Date: _____ Estimated Completion Date: _____
Staff Contact: _____ Phone # _____
Comments: _____

ACKNOWLEDGEMENT BY OTHER AFFECTED CITY DEPARTMENTS: (IF APPLICABLE)

- | | | |
|---|--|---|
| <input type="checkbox"/> City Administrator | <input type="checkbox"/> Library | <input type="checkbox"/> Safety Committee |
| <input checked="" type="checkbox"/> City Attorney | <input type="checkbox"/> Mayor | <input type="checkbox"/> Streets |
| <input type="checkbox"/> City Clerk | <input type="checkbox"/> Planning | <input type="checkbox"/> Treasurer |
| <input type="checkbox"/> Building | <input type="checkbox"/> Police | _____ |
| <input checked="" type="checkbox"/> Engineer | <input type="checkbox"/> Public Works, Parks | _____ |
| <input type="checkbox"/> Fire Dept. | <input type="checkbox"/> P & Z Commission | _____ |

RECOMMENDATION FROM APPLICABLE DEPARTMENT HEAD:

Motion to direct staff to proceed in replacing non-compliant street lights with full cut-off (compliant) fixtures, in a manner consistent with Idaho Power's maintenance schedule for 2011 and 2012.

ADMINISTRATIVE COMMENTS/APPROVAL:

City Administrator _____ Dept. Head Attend Meeting (circle one) Yes No

ACTION OF THE CITY COUNCIL:

Date _____

City Clerk _____

FOLLOW-UP:

*Ord./Res./Agmt./Order Originals: Record
Copies (all info.): _____
Instrument # _____

*Additional/Exceptional Originals to: _____
Copies (AIS only)

Hailey Street Lighting Master Plan

July 2010

- 1) Establish a tariff rate for LEDs, induction, or other alternative energy efficient lighting.
- 2) Decide whether fixtures can be installed now that meet the ordinance requirements, but also allow for easy conversion to LEDs in the future, when Idaho Power develops a tariff.
- 3) Decide whether the City can purchase, install, and maintain LEDs on Idaho Power's poles, if a tariff for LED costs is not established.

The development of these items by Idaho Power is a key component to action taken by the City, which is further described in the Planning Approach.

Existing Conditions

The information below reflects information collected by Idaho Power regarding the current street light types, wattage, and height. Greater detail and locations can be found in an attached document.

The following are the current numbers of street lights and their associated wattage that are not equipped with full-cut off and downcast fixtures.

<u>Watts</u>	<u>Count</u>
100	79
200	20
400	1
Total	100

Applicable Ordinances

Article 8B, Outdoor Lighting, of the Hailey Zoning Ordinance No. 532 and as amended will apply to the Street Light Master Plan document:

Section 8B.2.2 (d)

“All existing exterior lighting subject to the Street Lighting Master Plan, referenced by Hailey Ordinance No. 1057, shall be brought into conformance with this Article as specified by the Street Lighting Master Plan.”

Section B.4.1 (c)

“Idaho Power shall not install any luminaires after the effective date of this Article that lights the public right of way without first receiving approval for any such application by the Lighting Administrator.”

Section 8B.4.3 (c)

“Streetlights used on arterial roads may exceed twenty five (25) feet in height, with the recommendation by the City Engineer, and only with a finding that exceeding twenty five (25) feet is necessary to protect the safety of the residents of Hailey.”

Preferred Action

Due to a lack of established information from Idaho Power, this Street lighting Master Plan addresses a series of preferred actions that may be amended as future information is received from Idaho Power. The determination of a preferred action will be selected by the Council following the receipt of additional information from Idaho Power, which is expected sometime between the fall of 2010 and winter of 2011. In all preferred actions, the fixtures will be made compliant. The differences between the preferred actions specify the type of fixture that will accommodate a specific type of lamp, as detailed below:

1st Preferred Action

Install compliant fixtures with LED or other alternative energy efficiency lamp

- Depends on the cost of the tariff(s) established by ID Power
- If no replacement or maintenance tariff is established by ID Power, the City may consider purchasing, replacing, and maintaining all fixtures and lamps with LEDs, provided ID Power establishes an energy usage tariff

2nd Preferred Action

Install compliant fixtures with HPS lamps that can be converted to LEDs in the future

- Depends on whether this is an option, as determined by Idaho Power
- Winter 2011 replace fixtures and install HPS lamps. At a later date, consider installing LEDs or alternative lamps if and when Idaho Power establishes a tariff, without having to replace the fixtures a second time.

3rd Preferred Action

Install compliant fixtures with compliant HPS lamps

- Achieves compliance with Article 8B, but does not increase energy efficiencies and may require additional expenditures if fixtures are required to be replaced to accommodate the City's preference for LEDs in the future.

Lighting Criteria

All non-compliant fixtures will be made conforming with respect to Article 8B as amended during the aforementioned phasing approach. Both the fixture type and the lumens or equivalent foot candle levels established by the ordinance will be made conforming during the upgrades.

Greater detail can be found in Article 8B, Section 8B.4.4 (d) of the Hailey Zoning Ordinance No. 523. At the City's request, the installation of lights that produce lower levels of lumens or equivalent foot-candle measurements shall be installed so long as Idaho Power has a tariff established for the lamp type requested. Lower light levels may be desirable if the City determines that reductions in energy consumption are a preferred priority.

Review and Monitoring

On June 1st of 2011, 2012, 2013, and 2014, following Idaho Power's routine maintenance, Idaho Power will supply the City with a list of all lights changed. The list will specify the location of each light and the change(s) made. The changes made to the street lights should reflect the requirements of Article 8B, Hailey Zoning Ordinance No. 523, as amended.