

1. Energy And Sustainability Agenda March 15, 2016

Documents: [AGENDA 3_15_2016.PDF](#)

2. Review Minutes Of February 18 Meeting

Documents: [DRAFT MINUTES FROM 2_18_2016.PDF](#)

3. Receive Draft South Portland Pesticide Ordinance

1. Presentation by Julie Rosenbach, Sustainability Coordinator, City of South Portland
2. Presentation by Henry Jennings, Director, Maine Board of Pesticides Control

Documents: [SOUTHPORTLANDPESTICIDEORDINANCE.PDF](#)

4. Solar Power

1. Progress report on City of Portland Solar Project
2. Presentation by Tim Schneider, Maine Public Advocate

Documents: [SOLAR PROJECT UPDATE.PDF](#)

5. Energy Efficiency - 2030 District

1. Presentation by Dave Low, Network Liaison for 2030 District Networks

6. Portland Jetport Master Plan

1. Presentation by Paul Bradbury, Director of Portland Jetport

Documents: [REPORT ON THE PORTLAND JETPORT MASTER PLAN.PDF](#)

7. Committee Work Plan

1. Review work plan for the Energy and Sustainability Committee

Documents: [WORK PLAN PRIORITY FRAMING MEMO.PDF](#)

CITY OF PORTLAND, MAINE

Standing Committee on Energy and Sustainability

Councilor Jon Hinck (A/L), Chair

Councilor Spencer Thibodeau (D2), Vice Chair

Councilor Ed Suslovic (D3)

Agenda

March 15, 2016

5:00 PM

Council Chambers

1. Review and approve minutes from February 18, 2016
2. Pesticides – Receive Draft South Portland Ordinance
 - Presentation by Julie Rosenbach, Sustainability Coordinator, City of South Portland
 - Presentation by Henry Jennings, Director of Maine Board of Pesticides Control
3. Solar Power
 - Progress Report, City Solar Project
 - Presentation by Tim Schneider, Maine Public Advocate and Discussion of LD1649
4. Energy Efficiency – 2030 District
 - Presentation by Dave Low, Network Liaison for 2030 Districts Network
5. Jetport Master Plan
 - Presentation by Paul Bradbury, Director
6. Discuss Committee Work Plan

CITY OF PORTLAND, MAINE

Standing Committee on Energy and Sustainability
Councilor Jon Hinck (A/L), Chair
Councilor Spencer Thibodeau (D2), Vice Chair
Councilor Ed Suslovic (D3)

Meeting Minutes
February 18, 2016

Councilors present: Councilor Hinck, Councilor Suslovic, Mayor Strimling

Staff present: Troy Moon, Jeff Tarling, Jean Frasier

1. Approval of Minutes:

Motion to approve minutes made by Councilor Suslovic. Seconded by Councilor Hinck. Both in favor.

2. Energy Disclosure and Benchmarking

Councilor Hinck introduces guest speaker, Carolyn Sarno Goldthwaite, Senior Program Manager for High Performance Buildings, and Charles Taylor, Research and Analysis Associate, of the Northeast Energy Efficiency Partnership (NEEP) to discuss energy disclosure and benchmarking.

NEEP is a regional energy efficiency organization partly funded by the US Department of Energy.

The speakers note that the goal of benchmarking and disclosure is to make energy use transparent to building owners and the public. This spurs targeted investment in energy efficiency that reduces energy consumption in the built environment. Specific outcomes include:

- Public reporting of energy usage to create energy baselines and measuring the impact of energy efficiency measures
- Finding underperforming buildings and identifying opportunities for energy savings
- Allowing tenants or purchasers to make informed decisions about energy usage
- Spurring the creation of local jobs in energy efficiency

The speakers offer several examples of cities with benchmarking and reporting ordinances that have seen large decreases in energy use and significant cost savings in the private sector. These include Seattle, Boston, New York, Baltimore, and Cambridge, MA.

Results of benchmarking include:

- Better understanding of energy usage throughout the city
- Energy savings
- Increased jobs from energy efficiency
- More transparency in real estate transactions
- Higher sale price or rent for energy efficient buildings
- More efficient operation of buildings
- Ability to craft targeted assistance programs where they will be most effective

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Councilor Suslovic noted that local businesses and GPCOG were working to start a Portland 2030 District. He would like to see regional collaboration if possible as property owners have buildings in surrounding towns as well. He supports the creation of a working group to include a variety of stakeholders who would be impacted by an energy benchmarking and disclosure ordinance to include the 2030 District, MEREDA, Realtors, and GPCOG. He indicates the City should work to benchmark its own buildings as soon as possible in order to offer leadership. We can't expect the business community to do so if we have not.

Councilor Hinck is also interested in creation of a working group. He asks Mayor Strimling about the process for moving this forward.

Mayor Strimling indicates that energy efficiency is a Council goal. He suggests that the Energy and Sustainability Committee could form a task force or develop ordinance language itself but there should be communication with the Council as a whole about how things will proceed.

Councilor Suslovic prefers a working group in order to get feedback from the groups who would be affected by an ordinance. He believes the process goes much more smoothly when all parties are at the table.

Mayor Strimling indicates that he would like to see a process that would not take up an inordinate amount of time.

3. Discussion of Street Lighting

Troy Moon introduces opportunities from recent changes in state legislature that allow the City to own and meter street lights on utility poles. He explains that officials in Falmouth, South Portland, and Rockland have been leaders in this area and are have advanced an RFQ to begin the conversion process in their towns. Portland staff are beginning to look closely at the savings opportunities presented by LED conversion.

Carolyn Sarno Goldthwaite presents information about potential savings to municipalities that convert to LED. She indicates that:

- Street lighting is often 20 - 40% of a city's utility costs
- LED have better quality of light than other technologies
- LEDs offer the potential for more control over lights such as varied light levels and the ability to turn individual lights on/off.

She adds that switching to LED now is even more beneficial now because the unit costs per light have fallen dramatically during the past few years. Cities now benefit from this savings as well as reduced energy consumption.

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Ms. Goldthwaite suggests that energy service performance contracts can be an effective way to fund conversions but cities should look carefully at the details of the contract. This approach can be beneficial if capital resources are constrained.

Boston, Pittsburgh, NYC, Asheville, Baltimore, examples of cities that have converted or are converting to LED.

Councilor Suslovic points out that the City Council has made street light conversion to LEDs a priority and that we should put attention on this issue to move it forward.

Councilor Hinck agrees with this.

4. Forestry

Jeff Tarling, City Arborist, describes the City's forestry program and tree inventory. He reports that we have 19,465 street trees catalogued. Much of the City has good canopy but some areas are challenged, especially places like Bayside. Morrill's Corner is another example of place with few trees.

Finding adequate space for a healthy tree is difficult in an urban environment. Conditions are challenging due to small sidewalk cuts, high traffic, and damage from winter maintenance. Utility work to protect power lines can have a high impact on street trees. Mr. Tarling recommends further study into the value trees provide the City by cleaning storm waste, improving air quality.

The City's maintenance efforts include:

- Pruning 1000 - 1200 trees per year
- Planting 230 per year, largely through the donations

Mr. Tarling indicates that we need strategic planning to maintain canopy in the future and to stay ahead of changing conditions brought on by ne.

Councilor Suslovic notes that Council goal setting showed a strong interest in trees. He would like to develop a policy for Council to adopt that sets specific targets for tree planting, especially for underserved neighborhoods. He questions whether we are allocating adequate resources to care for trees. He requests staff for a report outlining specific goals for tree planting and tree maintenance. This should include the number of trees that should be planted each year to maintain canopy and how the number of trees that must be pruned to maintain canopy. He would like a report during the April meeting.

Councilor Hinck states that, if we are to adopt a tree plan, status quo would be the minimum standard. He would like to see status quo in well served areas with increase in canopy in underserved areas of the City. He feels advancing a tree policy would be in keeping with Council goals.

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5. Work Plan

Councilor Hinck moves that the work plan be taken up during the March meeting in light of Councilor Thibodeau's absence. Councilor Suslovic agrees.

Mr. Moon indicates that Councilor Thibodeau has requested that the next meeting be March 15 as he will be away on March 16. Councilor Suslovic and Councilor Hinck agree.

6. Public Comment:

Sam Saltonstall, Peaks Island, advocates for increased energy efficiency but also wants to be sure we consider building health. He references the Peaks Island Community Center.

Anne Pringle is pleased to see trees on the agenda. She supports a tree policy for the city. She advocates that the Trust of Public Land report be taken up by the committee. She supports improving street lighting with conversion to LED, including in parks.

John Thibodeau asks the committee take up the South Portland ordinance in order to do joint work with that community.

Jesse O'Brien reports that the Maine Board of Pesticides Control is ramping up public education. He also mentions some efforts in Scarborough and Kennebunk.

Councilor Hinck states that he wants to make sure we consider all of our lights, including parks, when we consider conversion. He also indicates that the Committee will bring pesticides back when South Portland releases a draft.

Councilor Suslovic makes a motion to adjourn. Both in favor.

City Council Workshop

Agenda Item #2

February 29, 2016

Pesticides Ordinance

At the June 8, 2015 workshop, the Council heard a presentation put together by Protect South Portland around the use of pesticides. Protect South Portland was joined by Jay Feldman, from Beyond Pesticides in Washington DC; Chip Osborne, of Osborne Organics LLC in Marblehead, MA; and Mary Cerullo, Associate Director, of the Friends of Casco Bay. Each talked about the harmful effects of pesticide use and the negative impacts to the environment. Alternative methods were presented as a means of providing another way for lawn care/vegetation maintenance.

The City Council voiced support for pursuing a pesticide ordinance and various types of ordinances were presented and discussed at the July 13, 2015 workshop. A pesticide ordinance committee consisting of Sustainability Coordinator Julie Rosenbach, Parks, Recreation & Waterfront Acting Director Sarah Neuts and Stormwater Program Coordinator Fred Dillon was created and proposed ordinance language was developed (attached), which will be discussed at next Monday's workshop.

Included is a memorandum from Julie Rosenbach which includes an outline of the process taken to develop the ordinance. The committee members will be at Monday's meeting to answer any questions.


City Manager



**SUSTAINABILITY
OFFICE**

JULIE A. ROSENBACH
Sustainability Coordinator

To: James H. Gailey, City Manager
From: Julie Rosenbach, South Portland Sustainability Coordinator
CC: Fred Dillon, South Portland Stormwater Program Coordinator
Sarah Neuts, Acting Director, Parks, Recreation & Waterfront
Date: February 22, 2016
Subject: Draft Ordinance to Ban the use of Pesticides

Following a City Council Workshop this past summer on organic landscaping and lawn care practices (June 8, 2015) and subsequent workshop to review different types of pesticide ordinances (July 13, 2015), the City Council directed staff to develop an ordinance that greatly reduces and potentially eliminates the use of synthetic pesticides throughout most of the City.

Over the next six months, the designated staff draft pesticide ordinance committee (consisting of myself, Sarah Neuts, Parks Department Superintendent and Fred Dillon, Stormwater Program Coordinator) reviewed numerous documents and conducted several interviews with groups and individuals including policy makers, practitioners, local advocates and industry representatives to develop a draft ordinance. **The attached memo summarizes our process and key considerations for the Council.**

The draft ordinance, completed in January 2016, represents an earnest attempt by staff to balance public health and environmental protection with aesthetic expectations for public and private landscape management.

To summarize, we focused on drafting an ordinance that is bold but realistic.

We relied on the precautionary principle to guide our efforts, acknowledging that while the science regarding risks associated with synthetic pesticides is not settled, there are enough studies linking these products to reproductive disorders, birth defects, learning disabilities, neurological disease, endocrine disorders, and cancer to warrant a ban with minimal exemptions.

At the same time, we recognize there may be situations we have not and cannot anticipate so we included a waiver process in the ordinance and designed it to be a living document that is revisited in year 3 and adjusted as needed.



**SUSTAINABILITY
OFFICE**

JULIE A. ROSENBACH
Sustainability Coordinator

We included a long implementation period to allow sufficient time for a successful transition in our thinking and practices. It is also important to note that during the transition phase lawn and turf conditions may appear to get worse before they get better because it takes time to (re)build a healthy and resilient ecosystem which is not dependent on synthetic chemicals.

Recognizing that any meaningful reduction of synthetic pesticides will depend on the cooperation of residents and local businesses, we included a robust education and outreach section. Because the ordinance will involve a culture change as much as a policy change, we believe the strong education and outreach section balances the challenges inherent to enforcement.

The overarching goal of the ordinance is to reduce toxics in our community by reducing the use of synthetic pesticides and promoting a transition to organic land care practices. The Council's review of the ordinance and subsequent public input may provide further refinement, which staff are ready to incorporate.

Lastly, as you may know a bill (LD 1543) was introduced at the state level which would require municipalities to create a "municipal reviewing authority that is similar to the Board of Pesticides Control" in order to pass any type of local ordinance. The Maine Municipal Association (MMA) voted to oppose this bill at their last meeting, and Maine's Environmental Priorities Coalition has made it one of their four priority bills. The bill was assigned to the State and Local Government Committee but then tabled pending review, where it has remained. The bill is expected to remain tabled this session.

Respectfully,

A handwritten signature in black ink, appearing to read "Julie Rosenbach".

Julie Rosenbach
Sustainability Coordinator

South Portland Draft Pesticide Ordinance Process & Key Considerations

BACKGROUND

In early June of 2015, the nonprofit group Protect South Portland sponsored a presentation to the City Council by proponents for organic landscaping and lawn care practices. The goal of this initiative was to encourage the Council to consider establishing an ordinance that greatly restricts or eliminates the use of synthetic pesticides and fertilizers throughout most of the City in recognition of growing concerns about adverse impacts from the use of these materials on public health and the environment.

The Council held a subsequent meeting in July 2015 to allow for public comment. The majority of speakers favored the creation of an ordinance that would ban the use of synthetic pesticides in most cases. Individuals who expressed reservations with a pesticide ban generally represented commercial landscaping and lawn care interests and favored an Integrated Pest Management (IPM)¹ approach rather than an outright ban of synthetic pesticides. All of the Councilors supported the creation of an ordinance to regulate synthetic pesticide use with some strongly preferring an outright ban and others favoring a more moderate approach. Following extensive coverage in local newspapers, the City Manager subsequently received more balanced comments for and against a ban on synthetic pesticides.

Shortly after the July 2015 Council meeting, an intern for the City Manager developed an initial draft pesticide ordinance based on several similar documents developed by communities throughout the State and elsewhere in the country. The City Manager then appointed a committee consisting of the Sustainability Coordinator, the Parks & Recreation Department Superintendent and the Stormwater Program Coordinator to further develop and refine the draft ordinance based on more in-depth research.

Staff reviewed numerous documents and conducted several interviews with groups and individuals including policy makers, practitioners, local advocates and industry representatives to finalize the draft ordinance. The discussion below summarizes the rationale and most significant findings for the final draft document that the Council will consider in early 2016.

INTRODUCTION

Given the Council's consensus that synthetic pesticide use in South Portland should either be restricted or eliminated, staff relied on the ***precautionary principle*** to guide their efforts

¹ [Integrated Pest Management](#) consists of practices that emphasize quality production and health while minimizing reliance on pesticides.

in developing the draft ordinance. The precautionary principle acknowledges that while there may be conflicting scientific claims about the relative risks associated the use of potentially harmful products, erring on the side of caution by reducing the use of these products is justified to protect public health and the environment – particularly when the costs to do so are not excessive. Staff considered the four central tenets of the precautionary principle² when drafting the ordinance:

- Taking preventative action in the face of uncertainty
- Shifting the burden of proof to the proponents of an activity
- Exploring a wide range of alternatives to possibly harmful actions
- Increasing public participation in decision making

Even though monitoring for synthetic pesticides in South Portland has been limited, there is evidence that these chemicals are a potential cause for concern. There is also an increasing body of research both nationally and globally that synthetic pesticides are having detrimental effects on human health and the environment.

The draft ordinance addresses these concerns by greatly restricting synthetic pesticide use and promoting organic landscaping and lawn care practices to prevent pest problems. The ordinance also stresses the importance of education and outreach in recognition that any meaningful reduction of potentially harmful chemical use depends on the cooperation of residents and local businesses.

Thus, the overarching goal of the ordinance is to reduce toxics in our community by reducing the use of synthetic pesticides and promoting a transition to organic land care practices. In so doing, the ordinance will protect people, pets and the environment.

PROCESS FOR DEVELOPING DRAFT ORDINANCE

In the process of developing South Portland's draft ordinance, staff reviewed a wide variety of information sources including (but not limited to):

- ***Academic research studies and summaries:*** policy implementation evaluation of Toronto's municipal bylaw; study on state regulations, organic lawn management, and nutrient accumulation in soils; journal article on the precautionary principle and its applications; and Rutgers University paper on the management of turf grass using 'low-impact' pesticides.
- ***Local, state and federal regulations and guidance documents:*** Maine Board of Pesticide Control; Environmental Protection Agency; Canada Ministry of Environment; European Union; Washington State Dept. of Agriculture; and several municipal ordinances.

² [The Precautionary Principle in Environmental Science](#) (Sept. 2001 Environmental Health Perspectives)

- ***Non-governmental organization interviews and reference documents:*** Beyond Pesticides; Friends of Casco Bay; Casco Bay Estuary Partnership; Maine Organic Farmers and Gardeners Association; and the Northeast Organic Farming Association.
- ***Interviews with local and state governmental officials:*** Takoma Park MD; Ogunquit ME; and the Cumberland County Soil and Water Conservation District.
- ***Interviews with private landscaping contractors:*** Ornamental Horticulture Council; Maine Landscape and Nursery Association; Down East Turf; Lucas Tree; Sable Oaks Golf Course; Scotts Lawn Care; Broadway Gardens; Osborne Organics; and Go Green Landscaping.

This in-depth process included detailed discussions by staff about which provisions to include in the draft ordinance. From mid-July until late December, staff met on a weekly (and occasionally biweekly) basis to carefully consider all elements in the draft ordinance. The most substantive discussion topics and resulting decisions – all of which were reached by consensus – are summarized below.

Fertilizers: after extensive research and careful consideration, staff decided that developing a comprehensive management strategy to protect water resources from nutrient runoff (esp. nitrogen) should be addressed through a separate stand-alone ordinance. Virtually all municipalities with fertilizer ordinances have also adopted this approach. Given [the increasing concerns about adverse impacts from excessive nitrogen inputs to Casco Bay](#), staff believe that developing a draft fertilizer ordinance would be a significant next step.

Provisions: Following the National Organic Program, the provisions of the ordinance are centered around natural and organic practices. In general, synthetic pesticides are prohibited unless specifically permitted and organic products are permitted unless specifically prohibited. It is also important to emphasize that "organic" is not synonymous with safe. There are risks associated the misuse and overuse of organic pesticides that can also result in adverse impacts to human health and the environment, although the risks are generally considered to be lower than those associated with synthetics.

Exemptions and Waivers: While the goal of the ordinance is to make organic pest management the primary management tool in our community, staff recognize that exemptions are necessary to ensure a successful transition. South Portland's draft ordinance allows for two exemption areas – which is less than most other municipal ordinances.

- **Public Health and Safety Protection:** there may be potential situations requiring the use of synthetic pesticides because there are currently no comparable organic alternatives available. The protection of public health and safety are paramount and

there are numerous circumstances that potentially qualify for an exemption as described in the ordinance.

- **Golf Courses:** there are currently few (if any) examples of golf courses that are being managed successfully without some synthetic pesticide use. Consequently, golf course playing surfaces have also been exempted until organic turf management practices become better established and proven. The City may want to consider creating a pilot program to test various organic practices at the municipal course prior to requiring these practices on a more widespread basis.

Waiver applications will be required for situations involving the protection of public health and safety. A Pesticide Management Advisory Committee (PMAC) will review these applications to ensure that the waiver requests are justified based on a lack of viable alternatives. The PMAC must find that three conditions exist prior to granting and/or approving a waiver; these conditions align with Shoreland Overlay Districts (article XIII) standards in our zoning ordinance.

Staff decided against exempting athletic playing fields primarily because of the higher likelihood that young athletes could come into direct contact with pesticides. Additionally, there are several examples in other communities where these areas are being managed successfully using organic pest management practices. There may also be grant funds available to assist the City in implementing these practices for our fields.

Public Notification: For instances when synthetic pesticides are allowed (through the waiver review process), the ordinance includes a detailed notification section that applies to both licensed applicators and private citizens. Staff believe this is an important provision because the public has a right to know when and where these chemicals are being applied.

Reporting: Even though the ordinance should greatly reduce synthetic pesticide use and potential exemptions will (hopefully) be few and infrequent, a reporting requirement is included to provide ongoing tracking data for the use of these chemicals. The City's Parks & Recreation Department already maintains detailed records for when, where, how much and what kind of synthetic pesticides are used on City properties. The ordinance will require landscaping contractors to annually report with the same level of detail for private properties.³ Staff also discussed requiring individual residents to provide synthetic pesticide usage data but recognized this would likely create an undue administrative burden.

Phasing: The phasing section allows for a transition period and begins with public properties to demonstrate the City's commitment to leading by example. There is a one

³ Landscaping contractors we met with stated that they already keep this data so it would not be overly burdensome to report it.

year lag period so municipal departments can test new practices and products. Phase 2 applies to all private property and begins after two years. Golf courses were initially considered for a third phase but there are currently not enough proven organic management practices to ensure that course playing surfaces could be maintained adequately. Consequently, emphasis was placed on data collection and management practices to inform future provisions. Since the ordinance is intended to be a living document, Phase 3 instead focuses on evaluating the effectiveness of the pesticide regulations and revising them as needed based on the condition of public land, community feedback, new information and emerging science.

Outreach and Education: Education alone has not proven successful in reducing the use of synthetic pesticides. According to the [Maine Board of Pesticide Control](#), the use of pesticides for residential land care has increased nearly sevenfold over the past twenty years. However, other municipalities have demonstrated that ordinances combining education with enforcement can be successful tools for setting new community standards.

Because the ordinance will be a culture change as much as a policy change, staff believe a strong outreach and education section balances the challenges inherent to enforcement. The behavior change approach outlined in the ordinance targets different segments of the population through diverse means and includes education for and through retailers. This provision in particular targets private citizens who are the least likely to have any knowledge or training about the hazards associated with synthetic pesticide use.

Staff also considered including provisions to require training and certification on organic land care for landscaping contractors but decided against it given that state law already requires all applicators of synthetic pesticides to be certified. However, the City may want to consider lobbying the Maine Board of Pesticides Control to establish an Organic Pest Management (OPM) certification program.

Authority: The Pesticide Management Advisory Committee (PMAC) has a lofty charge. The committee's success will depend largely on the effectiveness of their outreach and education strategy, which will require funding to develop and implement.

CONCLUSION

Following the public meetings earlier this year, the City Council directed the Manager to establish an ordinance that greatly reduces and potentially eliminates the use of synthetic pesticides throughout most of the City. The draft ordinance completed in January 2016 represents an earnest attempt by staff to balance public health and environmental protection with aesthetic expectations for public and private landscape management. The Council's review of this document and subsequent public input will allow further refinement to create an ordinance that best reflects the overall intent and interests of the community.

Purpose

The purpose of this article is to safeguard the health and welfare of the residents of the City of South Portland and to conserve and protect the City's water and natural resources. South Portland strives to make organic pest management the primary management tool in our community so that synthetic pesticide use and its damaging effects on the health and welfare of residents and the environment are significantly curtailed.

Findings

WHEREAS, The State of Maine is one of only 7 states, and the District of Columbia, that uphold the rights of localities to restrict pesticides, and this should be seen as an opportunity to affect positive change;

WHEREAS, the EPA, the Committee on Environmental Health of the American Academy of Pediatrics, the National Academy of Sciences, and the 2010 President's Cancer Panel have all concluded that pesticide exposure is linked to reproductive disorders, birth defects, learning disabilities, neurological disease, endocrine disorders, and cancer;

WHEREAS, the EPA acknowledges, along with esteemed Mt. Sinai Children's Environmental Health Center, that children, with their developing bodies and brains, are especially vulnerable to the harmful effects of lawn and garden pesticides. Children's behavior (hand to mouth interactions, proximity to the ground, walking or running through lawns instead of paved sidewalks, especially where there are none), dispose children to far more contact with lawn pesticides than adults;

WHEREAS, pesticides are harmful to pets, wildlife including threatened and endangered species, soil microbiology, plants, and natural ecosystems;

WHEREAS, the City of South Portland has five streams designated by the Maine Department of Environmental Protection (MEDEP) as "urban impaired" for failing to meet state water quality standards primarily due to adverse impacts from surrounding development. All of these streams drain to Casco Bay, which is widely recognized as a natural asset of significant ecological and economic value. The Bay faces long-term threats from stormwater runoff and the use of pesticides has the potential to exacerbate these threats;

WHEREAS, the use of hazardous pesticides is not necessary to create and maintain green lawns and landscapes given the availability of viable non-toxic alternative practices and products;

WHEREAS, people have a right not to be involuntarily exposed to pesticides in the air, water or soil that inevitably result from chemical drift and contaminated runoff;

WHEREAS, recognizing that if an emergency public health situation warrants the use of pesticides, which would otherwise not be permitted under this ordinance, the Pest Management Advisory Committee shall have the authority to grant a temporary waiver on a case-by-case basis after an evaluation of all alternative methods and materials.

WHEREAS, numerous communities and municipalities are embracing a precautionary approach to the use of toxic pesticides in order to adequately protect people and the environment from pesticides' harmful effects.

Definitions

The following words, terms and phrases, when used in this ordinance, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Commercial Agriculture: involves the production of crops for sale, crops intended for widespread distribution to wholesalers or retail outlets and any non-food crops.

Golf course: an area of land laid out for golf with a series of 9, 18 or more holes. Mini-golf courses are not considered golf courses.

Inert ingredient: Any substance (or group of structurally similar substances if designated by the Environmental Protection Agency), other than an active ingredient, which is intentionally included in a pesticide product, except as provided by EPA 40 CFR §174.3.

Invasive Species: An invasive plant is defined as a plant that is not native to a particular ecosystem, whose introduction does or is likely to cause economic or environmental harm or harm to human health. For purposes of this ordinance, invasive species include those listed by the Maine Bureau of Agriculture, Conservation and Forestry as currently invasive, potentially or probably invasive, and highly likely but not currently invasive.

Natural, organic or "Non-synthetic": A substance that is derived from mineral, plant, or animal matter and does not undergo a synthetic process as defined in section 6502(21) of the Organic Foods Production Act (7 U.S.C. 6502(21)).

Organic pest management: An extension of the principles and practices of organic agriculture to the care of turf and landscape.

Pests: are considered undesirable terrestrial or aquatic plants, insects, fungi, bacteria, viruses, nematodes, rodents, birds, animals, or other micro-organisms (except viruses, bacteria or other micro-organisms on or in living

persons or other living animals) declared to be a pest under federal or state laws.

Pesticide: Any substance or mixture of substances intended for preventing, destroying, repelling or mitigating any pest; any substance or mixture of substances intended for use as a plant regulator, defoliant or desiccant. It does not include multicellular biological controls such as mites, nematodes, parasitic wasps, snails or other biological agents not regulated as pesticides by the U.S. Environmental Protection Agency. Herbicides, fungicides, insecticides and rodenticides are considered pesticides.

Pest Management Advisory Committee (PMAC): shall act in an advisory capacity to develop and oversee the ordinance, and advise the City Manager or his/her designee of any problems encountered or amendments required to achieve the full and successful implementation of this article including granting waivers.

Synthetic: a substance that is formulated or manufactured by a chemical process or by a process that chemically changes a substance extracted from naturally occurring sources, except that such term shall not apply to substances created by naturally occurring biological processes.

Provisions

The following provisions shall be applicable to all turf, landscape and outdoor pest management activities conducted within the City of South Portland, on both public and private land.

(a) Permitted:

Use or application of natural, organic land care protocols.

All pest control products that can be used on Maine Organic Farmers and Gardeners Association Certified Farms, and/or products certified by the Organic Materials Review Institute and/or the Washington State Dept. of Agriculture and/or permitted by the USDA National Organic Program.

(b) Prohibited:

Use or application of synthetic pesticides on City-owned and private property, other than pesticides classified by the US Environmental Protection Agency as exempt materials under 40 CFR 152.25, and those products permitted by the Organic Materials Review Institute and/or the Washington State Dept. of Agriculture.

Exemptions

The following applications are exempt from the provisions of this ordinance:

- a. Commercial agriculture;
- b. Pet supplies such as shampoos and tick and flea treatments;
- c. Disinfectants, germicides, bactericides, and virucides;
- d. Insect repellents;
- e. Rat and rodent control supplies;
- f. Swimming pool supplies;
- g. Aerosol products;
- h. General use paints, stains and wood preservatives and sealants.

Prohibited pesticides may also be applied for the following purposes:

1. **Health and Safety** – Pesticides can be used to control plants that are poisonous to the touch, such as poison ivy; insects that bite, sting, are venomous or are disease carrying, like mosquitoes; and animals or insects that may cause damage to a structure, such as carpenter ants or termites.
2. **Golf course playing surfaces** – including tees, fairways, greens and roughs are conditionally exempt from this ordinance if the owner or operator of the golf course submits and makes public an annual management plan. The plan shall include: a map or plan of the golf course showing all application areas, all measures taken to minimize use of synthetic pesticides on playing surfaces and their exposure to humans and waterways to date, and how the use of pesticide ingredients will be minimized in the next calendar year. These plans must be made public by posting on the golf course's website and a copy provided to the Pest Management Advisory Committee. Non-playing areas associated with golf courses such as lawns, driveways, paths, patios, trees, shrubs, ornamental plantings and gardens are not exempt from this ordinance.

Waivers

In cases that threaten the public health and safety by creating a hazardous situation, and for the control of invasive species that pose a threat to the environment, individuals and/or companies may apply for a waiver from the provisions of this ordinance.

A waiver application is a public record, stating the proposed location(s) and timing(s) of use, substance(s) and amounts to be applied, the date(s) of application, and the reason for requesting use of a synthetic pesticide. The Pest Management Advisory Committee shall decide whether to issue a waiver, and for what duration.

The Pest Management Advisory Committee must find all three (3) of the following conditions to exist in order to approve a waiver for the application of a prohibited pesticide:

- (1) That natural and organic methods have proven unsuccessful;
- (2) The application of pesticides will not occur within two hundred and fifty (250) feet of a tributary, creek, stream, river, lake, or drainage ditch;
- (3) That the granting of the waiver will not result in material damage to other properties in the vicinity, nor be detrimental to the public health, safety or welfare;

Public Notifications and Signs

If prohibited pesticides are applied through an exemption or waiver, the following posting requirements are to be followed. These requirements are in addition to licensed applicators complying with the Maine Board of Pesticide Control rules regarding public notification:

1. Whenever pesticides are to be applied to any land subject to this ordinance, the responsible individuals and/or companies shall post warning signs that meet the requirements of this ordinance. These signs must be posted before application activities commence and left in place for at least 48 hours after actual application or until expiration of the restricted entry interval or reentry time indicated by the pesticide label, whichever is longer.
2. All signs shall be at least five inches high and four inches wide in size. Signs shall be attached to the upper portion of a dowel or other supporting device so that the bottom of the sign is not less than 12" and the top of the sign is not more than 48" above the ground. The signs shall be of rigid, weather resistant material substantial enough to be easily read for at least 48 hours when placed outdoors.
3. All notification signs must be light colored (white, beige, yellow or pink) with dark, bold letters (black, blue or green). They shall have lettering that is conspicuous and clearly legible.
4. The sign must bear the following state requirements:
 - a. The word "CAUTION" in 72 point type;
 - b. The words "PESTICIDE APPLICATION" in 30 point type or larger;
 - c. The Maine Board of Pesticides Control designated symbol;
 - d. Any reentry precautions from the pesticide labeling;
 - e. The name and telephone number of the entity making the pesticide application;
 - f. The date and time of the application;

- g. A date and/or time to remove the sign.
5. All notification signs shall state the chemical and trade name of the pesticide, the date to be applied, the length of time to remain off the treated area as indicated by the pesticide label, and a phone number of the responsible party for more information.

Reporting

In addition to complying with the Maine Board of Pesticide Control rules regarding record keeping and reporting requirements outlined in Chapter 50, all licensed applicators are required to submit to the City of South Portland an annual summary report. The report shall contain the following information for EACH application in the City of South Portland: date of application, street address, site and size of area treated, quantity and type of synthetic pesticide and diluents applied, EPA#, application method, total undiluted pesticide, and an explanation of any differences in pesticide use or quantity used from the previous annual report submitted.

Reports shall be submitted to the City Clerk's office by December 31 of each year.

Phase In

Phase One: Effective (Date - 1yr) Prohibits the use or application of pesticides on City-owned property, other than pesticides classified by the US Environmental Protection Agency as exempt materials under 40 CFR 152.25, and those products permitted by the Organic Materials Review Institute.

Phase Two: Effective (Date - 2yrs) Prohibits the use or application of pesticides on private property. It shall be illegal to apply pesticides on private property in the City, whether by the property owner or a tenant, service provider, or other agent. other than pesticides classified by the US Environmental Protection Agency as exempt materials under 40 CFR 152.25, and those products permitted by the Organic Materials Review Institute.

Phase Three: Effective (Date - 3yrs) Conduct an evaluation of this ordinance including a review of pilot project results and reporting data, and provide recommendations for any revisions deemed appropriate.

Outreach and Education

The City Manager or his/her designee shall publish notice of this ordinance and shall provide periodic notice to identified retailers and lawn, garden, and tree-care providers serving South Portland and to churches, schools, and other institutions in the City, upon adoption of this ordinance.

The Pest Management Advisory Committee shall prepare and publish materials designed to educate the community about the role of pesticides in our local environment and the benefits of organic pest management. This outreach should include:

- A. A community-based social marketing (CBSM) campaign targeting City households
- B. Distribution of information and news about City practices through South Portland internet and web-based resources
- C. SPC-TV public service announcements
- D. News releases and news events
- E. Tax and water bill inserts
- F. Posters and brochures made available at City events and applicable locations that serve the public
- G. Workshops, trainings, and demonstration projects
- H. Targeted outreach to schools
- I. Any additional methods deemed appropriate

The Pest Management Advisory Committee shall also develop a program to work directly with retailers who sell synthetic pesticides in the City of South Portland to:

- A. Provide educational training for all retail store employees who recommend and sell pesticides for use in the home and garden highlighting
 - (a) federal, state, and local pesticide regulations
 - (b) principles of organic pest management
 - (c) pesticide toxicity & health and environmental concerns
 - (d) proper pesticide display and storage
 - (e) the role of personal protective equipment, pesticide poisoning symptoms, and emergency procedures in case of spills
- B. Implement a toolkit consisting of educational materials and signage (i.e. posters, signs, stickers) that can be customized, printed, and placed in stores to help consumers understand the pesticide ordinance and alternatives to prohibited products/synthetic pesticides.

There are a variety of options for different levels of professional and municipal employee education and training based on the Northeast Organic Farming Association's (NOFA) *Standards for Organic Land Care*, which extends the principles of organic agriculture to land care practices:

- A. Accreditation through a three- to five-day course
- B. Certificate course online
- C. Trainings & webinars targeting organic management of turf and lawn

Authority

The South Portland City Manager or his/her designee shall oversee the implementation of the synthetic pesticide ordinance. A Pest Management Advisory Committee shall be created to act in an advisory capacity to oversee the ordinance through

- (1) Advising the City Manager or his/her designee of any problems encountered or amendments required to achieve the full and successful implementation of this ordinance.
- (2) Reviewing and granting waivers when applicable.
- (3) Developing and implementing outreach and education as specified in the ordinance.
- (4) Reviewing annual data and issuing a summary report annually.
- (5) Additional responsibilities as deemed necessary by the City.

The Pest Management Advisory Committee will seek the participation, advice and counsel of experts in the fields of organic turf and landscape management, maintenance of trees and shrubs, and organic pest protocol. Broad community participation, from parents, schools, advocates, and local arboriculture and landscaping businesses, will be encouraged. The committee will work closely with the City's Sustainability Office to develop and implement outreach and education.

The Pest Management Advisory Committee shall include:

1. City Stormwater Coordinator
2. City Parks & Recreation Superintendent or his/her designee
3. Two Maine Board of Pesticide Control-licensed landscape professionals; at least one having experience in organic land care management; appointed by the City Manager or his/her designee.
4. Two resident or taxpayer representatives, at-large; appointed by the City Council.

The Pest Management Advisory Committee shall meet regularly and waivers shall be reviewed at scheduled committee meetings. Waiver applications must be submitted at least two (2) weeks before a scheduled meeting date in order to be reviewed. Minutes shall be kept of all meetings with a copy filed with the City Clerk. An annual report of the data submitted by all licensed applicators and a review of the committee's activities shall be submitted to the City Council in March of each year.

Fines and Enforcement

Any law enforcement or Code Enforcement Officer may issue a municipal complaint ticket or citation for offenses of this section.

- A. A first offense of any provision of this ordinance shall warrant a letter of warning.
- B. A second offense shall be punishable by a fine of two hundred dollars (\$200.00).
- C. The third offense shall be punishable by a fine of five hundred dollars (\$500.00).

- D. Any subsequent offense shall be punishable by a fine of one thousand dollars (\$1,000).



To: Councilor Hinck and Members of the Energy and Sustainability Committee
From: Troy Moon, Sustainability Coordinator
Date: March 11, 2016
Re: Update on Solar Power Project

Introduction

As you know, the City of Portland received a proposal from ReVision Energy to install solar arrays on four City buildings as well as on the Ocean Avenue Landfill. Staff provided a report on this project to the previous Transportation, Sustainability, and Energy Committee last Fall. Since that time, the City of South Portland has joined our project in an effort to advance solar power in both communities and to, hopefully, reduce overall project costs. During this meeting we will provide information about where the project currently stands. We will also update you on recent developments in Augusta that could have broad implications for solar power in Portland and around the State of Maine. We are also pleased that Maine Public Advocate, Tim Schneider, will be present to participate in this discussion.

Project Summary

This discussion will focus on the landfill portion of the proposal. Since joining forces with South Portland, this is where we have focused the bulk of our attention.

Under the current project proposal, Revision Energy would install identical 920 kW DC (660 kW AC) solar arrays on the Ocean Avenue Landfill and on South Portland's landfill. This is the maximum size allowed under current net metering rules. Each system would generate approximately 1,200,000 kWh of clean, renewable energy per year. In Portland, this would offset about 3.5% of the City's (including schools) annual electricity consumption from the grid.

As the proposal currently stands, the City would pay a premium for electricity generated in the short term (approximately \$50,000 annually for the first six years) through a power purchase agreement (PPA). Under this PPA, the third party financing entity would receive the benefits of the federal solar investment tax credits. These tax credits are not available to municipalities as we cannot take advantage of a tax credit. Utilizing this third party structure provides a benefit to the City as it reduces the overall cost of the project and in year seven, the City would have the option to buy out the system at a reduced price. After this point, the project would be cash positive and pay for itself annually as energy savings would likely exceed the cost of debt service and operations and maintenance. With current assumptions, the break-even point for this project would be in year 18.



Project Challenges

Though we believe solar is the best use for our landfill, there are some hurdles this particular project must overcome before we would consider it to be a sound investment.

First, we believe we can do better on the pricing. Staff from both cities are working together to review the details of the proposal and are in discussion with ReVision Energy regarding pricing and contractual details. Both cities would negotiate the terms of our contracts jointly if we move forward. At this point we view the current financial structure as a starting point. We plan to negotiate with Revision and their financing company to improve upon the proposed rates.

Second, the future of net metering in Maine is in flux. There are two significant regulatory changes pending at the state level which would affect this project. One is LD 1649, which would update Maine's distributed generation provisions by replacing net metering with fixed long-term contracts. This bill also would support community solar power by removing current rules that limit the size of solar arrays and the number of meters that may be served off-site. It is unclear at this time exactly how our project would be affected because there are no net metered systems in Maine that are as large as what we are proposing.

If this legislation does not pass, the Public Utilities Commission (PUC) will take up a request by Central Maine power to review whether the state's net metering program should continue or be modified, a provision triggered by solar reaching 1% of electrical generation.

Conclusion

The generation of renewable solar energy on the City's capped landfill has strong support in the community. We are excited to have a tangible proposal in front of us that may bring this to fruition. We view our collaboration with South Portland as a great opportunity to reduce our costs and work together to accelerate the adoption of renewable energy in our region. Staff in both cities will continue to work on this project and will keep this committee updated about our progress.



Portland International Jetport

SUSTAINABLE AIRPORT MASTER PLAN



PROJECT OVERVIEW

Sustainability Airport Master Plan Process

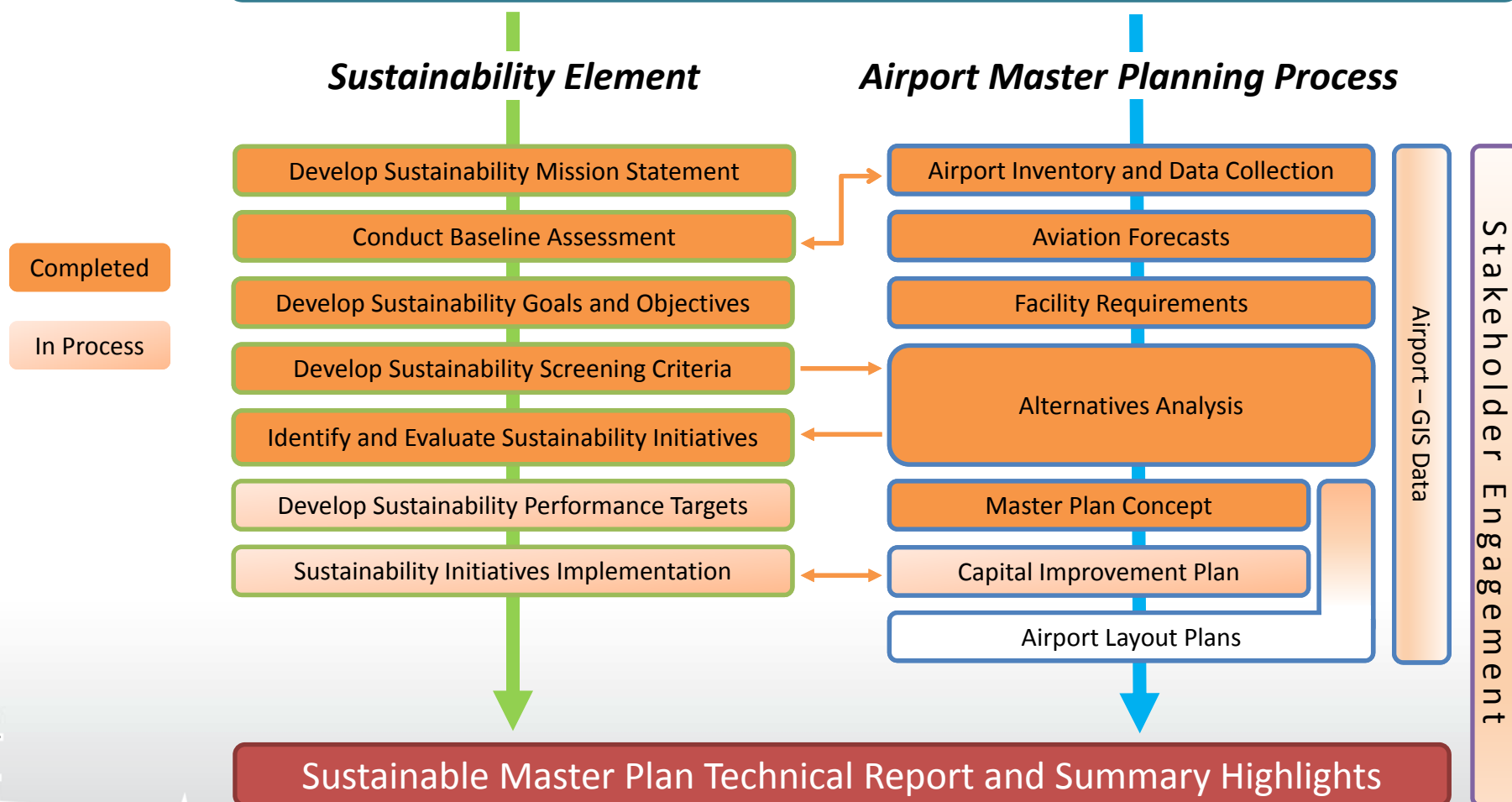
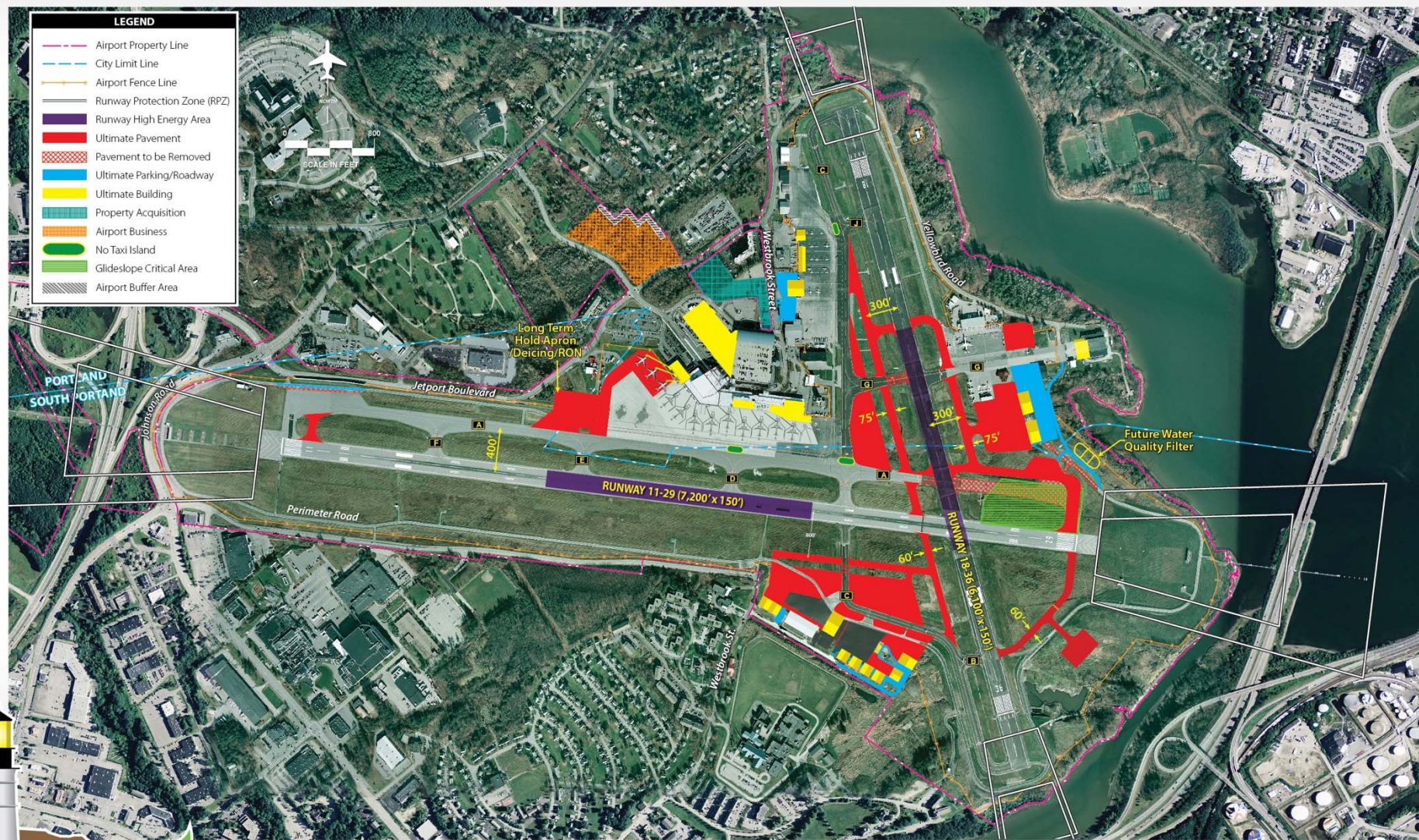


Exhibit 6A

RECOMMENDED MASTER PLAN CONCEPT





Capital Implementation Plan

Exhibit 7A

SHORT TERM DEVELOPMENT

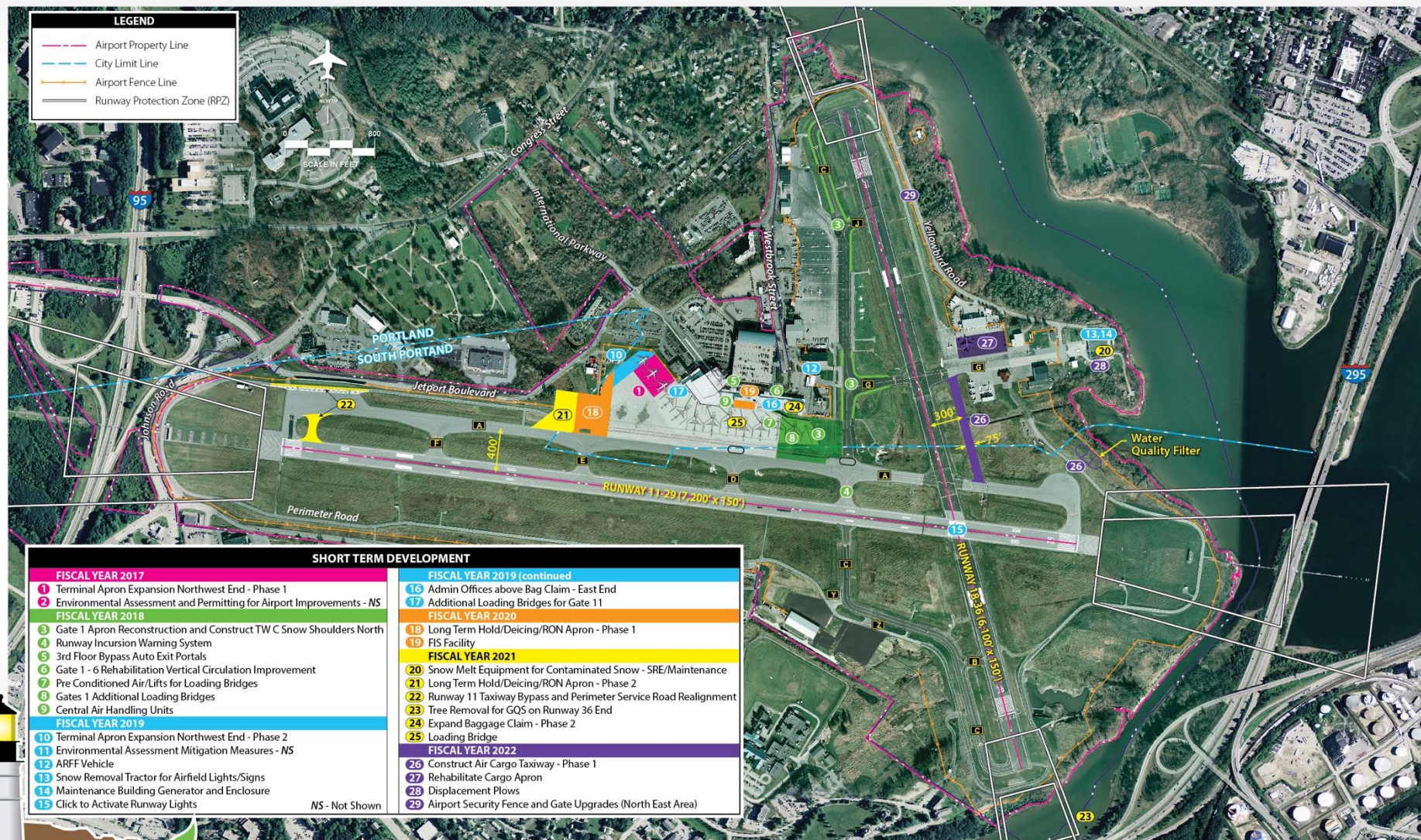


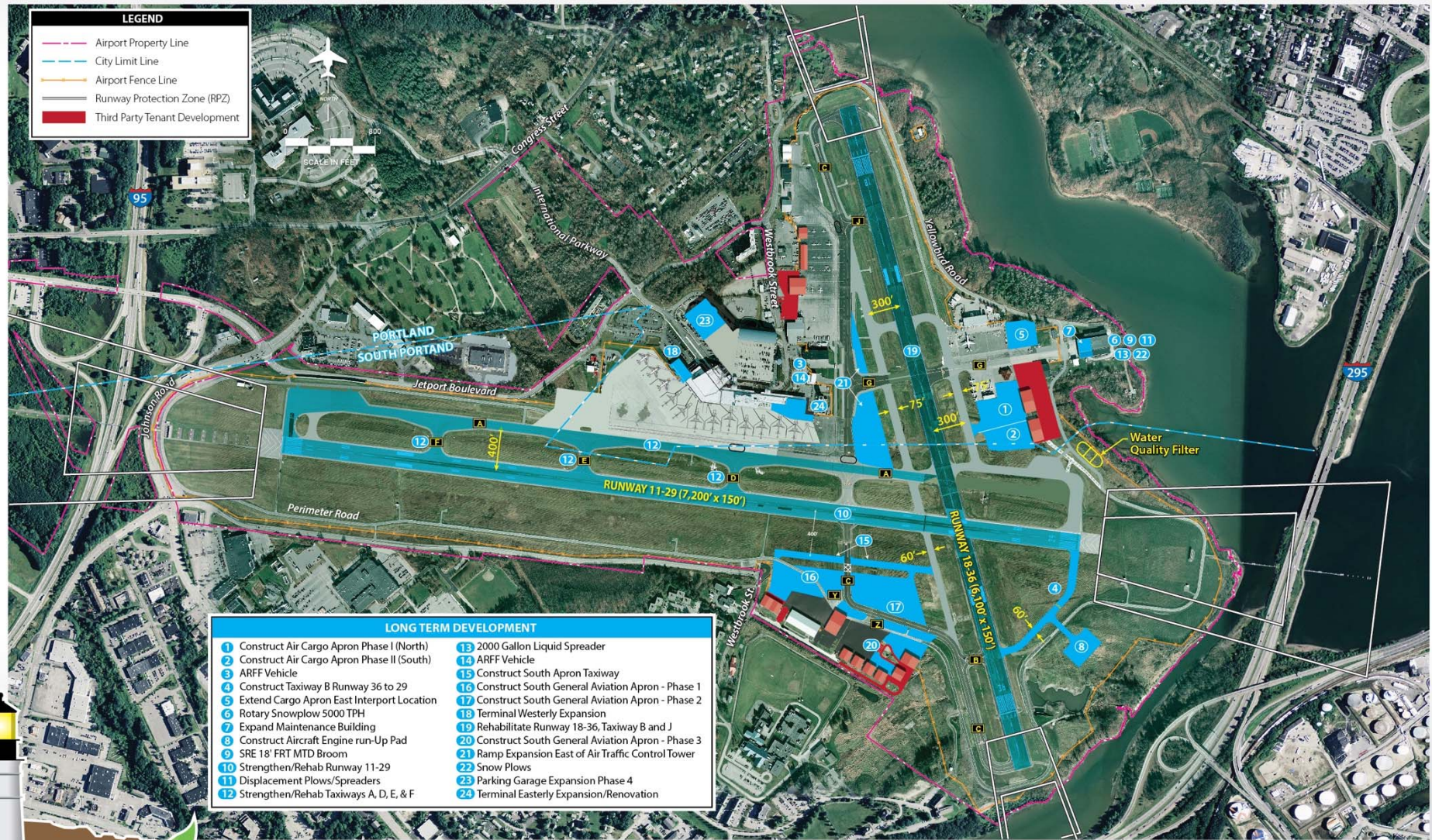
Exhibit 7B

INTERMEDIATE TERM DEVELOPMENT



Exhibit 7C

LONG TERM DEVELOPMENT





Financial Analysis

Table 7A

CIP PROJECT COSTS AND FUNDING SOURCES

Proj. No.	Description	Project Costs		Funding Sources			
		2016 \$	Inflated	AIP Grants	State	Local PFCs	Jetport
FISCAL YEAR 2017							
1	Terminal Apron Expansion Northwest End - Phase 1	\$3,290	\$3,379	\$3,041	\$169	\$0	\$169
2	Environmental Assessment and Permitting for Airport Improvements	750	770	693	39	0	39
Subtotal 2017		\$4,040	\$4,149	\$3,734	\$207	\$0	\$207
FISCAL YEAR 2018							
3	Gate 1 Apron Reconstruction and Construct TW C Snow Shoulders North	\$4,089	\$4,320	\$3,888	\$216	\$0	\$216
4	Runway Incursion Warning System	125	132	119	7	0	7
5	3rd Floor Bypass Auto Exit Portals	450	475	0	0	475	0
6	Gate 1 - 6 Rehabilitation & Vertical Circulation Improvement	2,000	2,110	0	0	0	2,110
7	Pre Conditioned Air/Lifts for Loading Bridges	900	949	854	0	0	95
8	Gate 1 Additional Loading Bridges	650	686	0	0	686	0
9	Central Air Handling Units	220	232	0	0	232	0
Subtotal 2018		\$8,434	\$8,903	\$4,861	\$223	\$1,392	\$2,427
FISCAL YEAR 2019							
10	Terminal Apron Expansion Northwest End - Phase 2	\$2,085	\$2,225	\$2,003	\$111	\$0	\$111
11	Environmental Assessment Mitigation Measures	1,000	1,083	975	54	0	54
12	ARFF Vehicle	1,000	1,083	975	54	0	54
13	Snow Removal Tractor for Airfield Lights/Signs	350	379	341	19	0	19
14	Maintenance Building Generator and Enclosure	250	271	244	14	0	14
15	Click to Activate Runway Lights	50	54	49	3	0	3
16	Admin Offices above Bag Claim - East End	1,500	1,625	0	0	244	1,381
17	Additional Loading Bridges for Gate 11	650	704	0	0	704	0
Subtotal 2019		\$6,885	\$7,424	\$4,586	\$255	\$948	\$1,636
FISCAL YEAR 2020							
18	Long Term Hold/Deicing/RON Apron - Phase 1	\$3,918	\$4,220	\$3,798	\$211	\$0	\$211
19	FIS Facility	7,000	7,787	0	0	7,398	389
Subtotal 2020		\$10,918	\$12,007	\$3,798	\$211	\$7,398	\$600
FISCAL YEAR 2021							
20	Snow Melt Equipment for Contaminated Snow	\$300	\$343	\$308	\$17	\$0	\$17
21	Long Term Hold/Deicing/RON Apron - Phase 2	2,400	2,600	2,340	130	0	130
22	Runway 11 Taxiway Bypass and Perimeter Service Road Realignment	1,028	1,100	990	55	0	55
23	Tree Removal for GQS on Runway 36 End	50	57	51	3	0	3
24	Expand Baggage Claim - Phase 2	10,000	11,425	0	0	10,854	571
25	Loading Bridge	515	588	0	0	588	0
Subtotal 2021		\$14,293	\$16,113	\$3,690	\$205	\$11,442	\$776
FISCAL YEAR 2022							
26	Construct Air Cargo Taxiway - Phase 1 TW G to TW A	\$3,660	\$4,200	\$3,780	\$210	\$0	\$210
27	Rehabilitate Cargo Apron	2,440	2,863	2,577	143	0	143
28	Displacement Plows	750	880	792	44	0	44
29	Airport Security Fence and Gate Upgrades (North East Area)	245	288	259	14	0	14
Subtotal 2022		\$7,095	\$8,230	\$7,407	\$412	\$0	\$412
TOTAL SHORT TERM		\$51,665	\$56,827	\$28,076	\$1,512	\$21,180	\$6,058

Proj. No.	Description	Project Costs		Funding Sources			
		2016 \$	Inflated	AIP Grants	State	Local PFCs	Jetport
INTERMEDIATE TERM							
1	Construct Taxiway C Realignment - Phase 1	\$6,080	\$7,524	\$6,772	\$376	\$0	\$376
2	Loading Bridge	538	666	0	0	666	0
3	Land Acquisition	1,948	2,476	2,228	124	0	124
4	Construct Air Cargo Taxiway - Phase 2	2,400	3,050	2,745	153	0	153
5	Loading Bridges	2,186	2,778	0	0	2,778	0
6	Replace Regional Boarding Ramps at Gate 1B and C	350	445	0	0	445	0
7	Relocate Taxiway A East of Runway 18-36	5,200	6,788	6,109	339	0	339
8	Construct Taxiway C Realignment - Phase 2	3,000	4,022	3,619	201	0	201
9	Relocate Service Access Road East of Cargo	600	804	724	40	0	40
10	Parking Garage Expansion Phase 3	15,000	20,108	0	0	0	20,108
TOTAL INTERMEDIATE TERM		\$37,302	\$48,661	\$22,197	\$1,233	\$3,889	\$21,341
LONG TERM							
1	Construct Air Cargo Apron Phase II (North)	\$4,300	\$5,920	\$5,328	\$296	\$0	\$296
2	Construct Air Cargo Apron Phase I (South)	3,000	4,130	3,717	207	0	207
3	ARFF Vehicle	1,500	2,065	1,859	103	0	103
4	Construct Taxiway B Runway 36 to 29	2,800	3,959	3,563	198	0	198
5	Extend Cargo Apron East Interport Location	1,900	2,686	2,418	134	0	134
6	Rotary Snowplow 5000 TPH	550	778	700	39	0	39
7	Expand Maintenance Building	3,750	5,445	4,901	272	0	272
8	Construct Aircraft Engine run-Up Pad	1,600	2,323	2,091	116	0	116
9	SRE 18' FRT MTD Broom	950	1,379	1,241	69	0	69
10	Strengthen/Rehab Runway 11-29	8,200	12,228	11,006	611	0	611
11	Displacement Plows/Spreaders	650	969	872	48	0	48
12	Strengthen/Rehab Taxiways A, D, E, & F	5,900	9,036	8,132	452	0	452
13	2000 Gallon Liquid Spreader	250	383	345	19	0	19
14	ARFF Vehicle	125	191	172	10	0	10
15	Construct South Apron Taxiway	2,830	4,451	4,006	223	0	223
16	Construct South General Aviation Apron - Phase 1	2,300	3,618	3,256	181	0	181
17	Construct South General Aviation Apron - Phase 2	2,300	3,715	3,344	186	0	186
18	Terminal Westerly Expansion	16,000	25,846	0	0	24,553	1,292
19	Rehabilitate Runway 18-36, Taxiway B and J	3,600	5,972	5,375	299	0	299
20	Construct South General Aviation Apron - Phase 3	3,000	4,977	4,479	249	0	249
21	Ramp Expansion East of Air Traffic Control Tower	7,200	12,267	11,040	613	0	613
22	Snow Plows	650	1,107	997	55	0	55
23	Parking Garage Expansion Phase 4	20,000	34,075	0	0	0	34,075
24	Terminal Easterly Expansion/Renovation	11,000	18,741	0	0	17,804	937
TOTAL LONG TERM		\$104,355	\$166,264	\$78,842	\$4,380	\$42,358	\$40,685
TOTAL CIP		\$193,322	\$271,752	\$129,116	\$7,126	\$67,426	\$68,084
PLUS: CAPITAL OUTLAY		\$30,738	\$40,498	\$0	\$0	\$0	\$40,498
TOTAL CIP AND CAPITAL OUTLAY		\$224,059	\$312,250	\$129,116	\$7,126	\$67,426	\$108,582

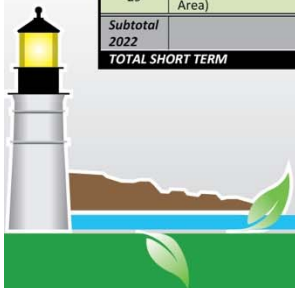
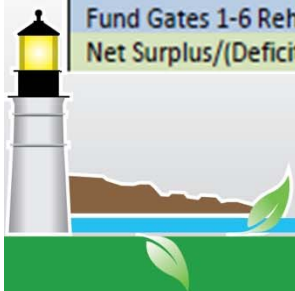


Table 7L
PRO FORMA CASH FLOW (in \$000's)

	Actual	Budget	Short						Intermedi- ate	Long
	2015	2016	2017	2018	2019	2020	2021	2022	2023 - 2027	2028 - 2036
Net Revenues										
Revenues	\$20,896	\$20,679	\$21,368	\$22,454	\$22,985	\$24,291	\$24,758	\$25,375	\$134,366	\$274,197
LESS: M&O Expenses	(13,881)	(14,312)	(14,713)	(15,122)	(15,543)	(15,976)	(16,417)	(16,867)	(90,557)	(192,392)
LESS: Adjust for Encumbrances	(84)	0	0	0	0	0	0	0	0	0
Net Revenues	\$6,931	\$6,367	\$6,655	\$7,332	\$7,442	\$8,315	\$8,341	\$8,508	\$43,809	\$81,805
Required Debt Service Fund Deposits										
Outstanding Bonds	\$4,275	\$4,272	\$4,268	\$4,276	\$4,275	\$4,269	\$4,271	\$4,265	\$21,330	\$32,353
Future Bonds	0	0	0	0	0	0	0	40	\$200	\$13,140
Required Debt Service Fund Deposits	\$4,275	\$4,272	\$4,268	\$4,276	\$4,275	\$4,269	\$4,271	\$4,305	\$21,530	\$45,493
Debt Service Coverage Ratio	1.62	1.49	1.56	1.71	1.74	1.95	1.95	1.98	N/A	N/A
Required Fund Deposits										
Revenues	\$20,896	\$20,679	\$21,368	\$22,454	\$22,985	\$24,291	\$24,758	\$25,375	\$134,366	\$274,197
Required Operating Fund Deposits	(13,881)	(14,312)	(14,713)	(15,122)	(15,543)	(15,976)	(16,417)	(16,867)	(90,557)	(192,392)
Required Debt Service Fund Deposits	(4,275)	(4,272)	(4,268)	(4,276)	(4,275)	(4,269)	(4,271)	(4,305)	(21,530)	(45,493)
Required M&O Reserve Fund Deposits	(166)	(108)	(100)	(102)	(105)	(108)	(110)	(113)	(526)	(1,118)
Jetport Share of Capital Outlay	(630)	(1,640)	(1,788)	(2,319)	(1,214)	(1,757)	(952)	(3,399)	(10,354)	(18,716)
Jetport Share of CIP	0	0	(207)	(2,427)	(1,636)	(211)	(205)	(412)	(1,233)	(4,380)
Jetport Unrestricted Cash to Fund Gates 1-6 Rehab	0	0	0	2,110	0	0	0	0	0	0
Net Surplus/(Deficit)	\$1,944	\$347	\$291	\$318	\$211	\$1,581	\$2,803	\$280	\$10,166	\$12,099





Economic Benefit Analysis

JETPORT ECONOMIC BENEFITS

Primary Aviation Gateway for State of Maine

Improves Quality of Life and Commerce

Supports Business and Economic Growth

Creates Measurable Employment/Income/Output

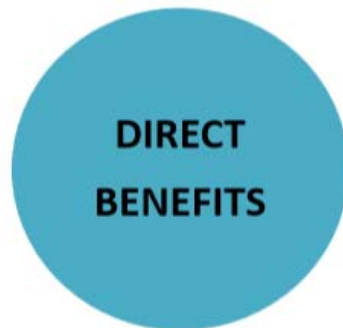


SOURCES OF TOTAL BENEFITS

**On Airport Activity
Airline & GA Visitors**



**Indirect Benefits (Payment to Suppliers)
Induced Benefits (Worker Spending)**



**Employment
Payroll
Output**



**Employment
Payroll
Output**



**Employment
Payroll
Output**



ECONOMIC BENEFIT CALCULATIONS

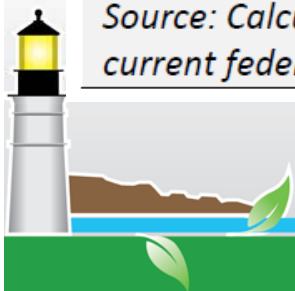
SOURCE	EMPLOYMENT	PAYROLL	OUTPUT
Direct Economic Benefits			
On-Airport Direct Benefits: <i>Private Firms, Government Agencies & Capital Improvement Projects</i>	1,329	\$54,061,000	\$287,999,000
Air Visitor Direct Benefits: <i>Commercial Service and General Aviation Travelers</i>	3,929	92,960,000	351,702,000
Direct Benefits	5,258	147,021,000	639,701,000
Secondary Economic Benefits			
Indirect Benefits: <i>Activity by Suppliers & Vendors</i>	1,571	65,877,000	225,311,000
Induced Benefits: <i>Activity by Workers as Consumers</i>	1,432	56,667,000	178,129,000
Secondary Benefits	3,003	122,544,000	403,440,000
Total Economic Benefits			
Total Benefits	8,261	\$269,565,000	\$1,043,141,000



FEDERAL, STATE & LOCAL TAXES

Source	FY 2015	Short Term	Intermediate Term	Long Term
Federal Taxes				
Corporate Profits Tax	\$14,766,000	\$16,599,000	\$17,944,000	\$20,847,000
Personal Income Tax	15,128,000	17,007,000	18,384,000	21,359,000
Social Security Tax	30,903,000	34,741,000	37,555,000	43,631,000
All Other Federal Taxes	7,128,000	8,013,000	8,662,000	10,064,000
Total Federal Taxes	\$67,925,000	\$76,360,000	\$82,545,000	\$95,901,000
State and Local Taxes				
Corporate Profits Tax	\$3,391,000	\$3,812,000	\$4,121,000	\$4,788,000
Property Tax	30,417,000	34,194,000	36,965,000	42,945,000
Sales Tax	24,017,000	26,999,000	29,187,000	33,909,000
Personal Income Tax	5,586,000	6,280,000	6,789,000	7,887,000
All Other State & Local	4,290,000	4,823,000	5,214,000	6,057,000
Total State & Local Taxes	\$67,701,000	\$76,108,000	\$82,276,000	\$95,586,000
Total Federal, State and Local Taxes				
Total Taxes	\$135,626,000	\$152,468,000	\$164,821,000	\$191,487,000

Source: Calculations from the IMPLAN input-output model based on state and local tax rates for Maine and current federal rates. All figures are in 2015 dollars.





Sustainability Plan

***“Be the Airport of
Choice for Maine!”***

- the Jetport's Vision



“The Portland International Jetport commits to be a premier New England airport. We will provide a convenient, safe, and environmentally conscious gateway that exceeds our travelers’ expectations while reflecting the essence of the Maine experience.”

- The Jetport's Mission Statement

SUSTAINABILITY FRAMEWORK



Greenhouse Gas Emissions

GOAL: Become a national airport leader in climate change mitigation by supporting the reduction of greenhouse gas emissions generated from Jetport-controlled and influenced sources



Energy

GOAL: Become a national airport leader in energy conservation, while considering opportunities for on-site renewable energy generation



Waste Management and Recycling

GOAL: Augment the Jetport's existing waste management practices to reduce waste generation and land disposal, and continuously improve its exemplary deicing fluid recovery and recycling program



SUSTAINABILITY FRAMEWORK



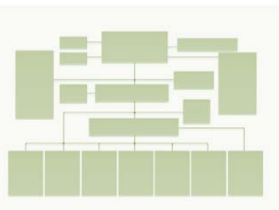
Ground Transportation and Access

GOAL: Enhance the efficiency of regional and local access to and from the Jetport with an emphasis on high-occupancy modes of transportation and parking infrastructure that meets the needs of the Jetport's users



Social Responsibility

GOAL: Promote the well-being of the Jetport's employees and customers, while reflecting and supporting the social, economic, and cultural assets of the local community and greater region



Governance

GOAL: Integrate sustainability throughout the Jetport's organizational framework





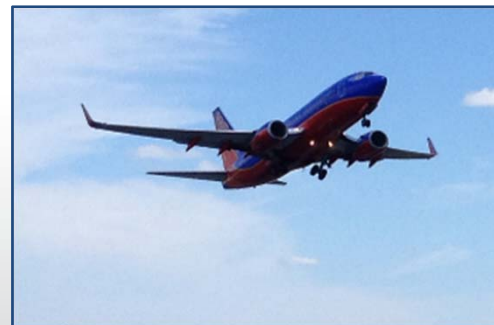
GREENHOUSE GAS EMISSIONS

OBJECTIVES

1. Reduce GHG emissions associated with Jetport-operated mobile and stationary sources on a per enplanement basis
2. Encourage GHG emissions reduction strategies among the Jetport's employees, tenants, and customers

TARGETS

- Install pre-conditioned air at 100% of all loading bridges by 2018
- Reduce Jetport owned/controlled greenhouse gas emissions by 20% below 2013 levels.
- Reduce tenant and public owned/controlled greenhouse gas emissions by 30% below 2013 levels.





ENERGY

OBJECTIVES

1. Reduce the energy intensity of Jetport-owned facilities
2. Pursue on-site generation of renewable energy, where feasible

TARGETS

- Increase energy efficiency of Jetport-owned facilities by 25% below 2013 levels
- Begin to measure percent of energy generated from renewable sources by 2018





WASTE MANAGEMENT & RECYCLING

OBJECTIVES

1. Reduce the amount of Jetport-generated municipal solid waste on a per enplanement basis
2. Increase the percentage of Jetport-generated municipal solid waste diverted from regional landfills
3. Continue to recycle and reuse construction and demolition waste to the greatest extent practicable
4. Prioritize the purchase and use of environmentally preferable products and materials in both Jetport and tenant operations
5. Provide the resources necessary to support continuous improvement of tenant waste management practices
6. Reduce deicing fluid reclamation and recycling operations cost

TARGETS

- Begin to measure the Jetport's composting rate by 2017
- Increase the Jetport's municipal solid waste recycling rate to 30% by 2020
- Continuously divert at least 90% of construction and demolition waste from landfills
- Recapture and recycle at least 75% of deicing fluid





GROUND ACCESS & TRANSPORTATION

OBJECTIVES

1. Provide choice to the Jetport's passengers by encouraging high-occupancy modes of transportation and the provision of adequate parking
2. Encourage the use of high-occupancy modes of transportation among employees commuting to and from the Jetport
3. Leverage regional partners to enhance and promote bicycle, pedestrian, and high-occupancy modes of transportation available to Jetport employees, customers, and visitors

TARGETS

- Appoint a transportation coordinator by 2017
- Identify the mode distribution of Jetport employees by 2018
- Identify the mode distribution of Jetport passengers by 2020





SOCIAL RESPONSIBILITY

OBJECTIVES

1. Expand or enhance existing programs that support employee health and satisfaction
2. Continuously improve the Jetport's customer service experience
3. Foster a "sense of place" by incorporating regional representative elements into the Jetport's public-facing facilities
4. Increase opportunities for employee, customer, and community engagement
5. Continue the Jetport's support of the regional economy, and promote its economic impact

TARGETS

- Increase the number of Jetport employees participating in Jetport-sponsored health and wellness programs to 80% by 2020
- Hold three employee appreciation events per year beginning in 2016
- Continuously improve Airport Service Quality rankings, as applicable and where possible





GOVERNANCE

OBJECTIVES

- Integrate sustainability criteria into the Jetport's decision-making processes
- Promote sustainability considerations in the daily activities of Jetport employees
- Drive accountability throughout all levels of the organization
- Enhance internal and external transparency of operations

TARGETS

- Present two sustainability-based employee recognition awards per year beginning in 2016
- Establish an internal Sustainability Working Group by 2017
- Ensure that 100% of capital projects are evaluated using sustainability criteria by 2017
- Engage three local organizations per year on the Jetport's sustainability program beginning 2017
- Participate in or establish a regional task force focused on sustainability by 2018

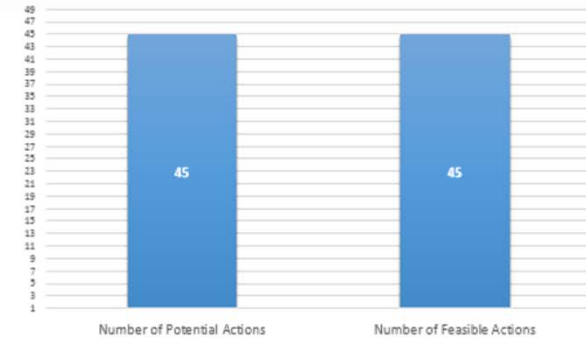


SUSTAINABILITY ACTION EVALUATION TOOL

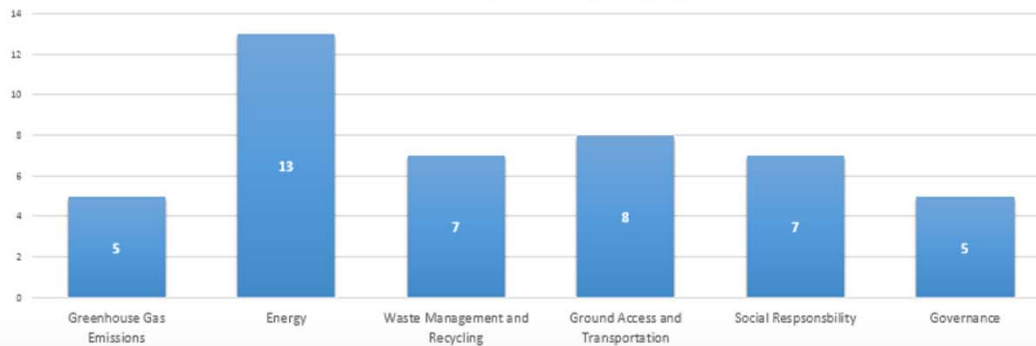
PWM Sustainability Action Evaluation Summary

	Cumulative	Greenhouse Gas Emissions	Energy	Waste Management and Recycling	Ground Access and Transportation	Social Responsibility	Governance
Number of Potential Actions	45	5	13	7	8	7	5
Number of Feasible Actions	45	5	13	7	8	7	5
Number of Short-term Actions	2	1	1	0	0	0	0
Number of Mid-term Actions	4	1	2	1	0	0	0
Number of Long-term Actions	3	1	2	0	0	0	0

All Sustainability Actions



Sustainability Actions by Category





Sustainability Action Implementation Plan

Action ID: Action:

Category:

Action Description:

Action Leader: Phone: Email:

Status: Started: Completed:

Date Needs: File Location:

Date Provided:

Expected Capital: Expected O&M: Expected Staff Hrs:

Capital To Date: O&M To Date: Staff Hrs To Date:

Implementation Step	TASK	TASK DESCRIPTION	TASK LEADER	TASK STATUS
1				
2				
3				
4				
5				



CITY OF PORTLAND, MAINE

Standing Committee on Energy and Sustainability
Councilor Jon Hinck (A/L), Chair
Councilor Spencer Thibodeau (D2), Vice Chair
Councilor Ed Suslovic (D3)

To: Councilor Hinck and members of the Energy and Sustainability Committee
From: Troy Moon, Environmental Programs Manager
Date: 2/13/2016
Re: Priority Setting for the Upcoming Year

During the Energy and Sustainability Committee meeting on January 21, committee members requested that staff organize the priorities discussed during the meeting in order to help them define an effective work plan for the upcoming year. In order to frame the discussion, we have organized the topics as action items and identified necessary steps staff and the council would need to take to implement them. We hope this will help the Committee determine which areas to focus its attention on this year.

Sustainability and Climate Action Goals

Action item: Establish meaningful carbon reduction goals for City operations and for the community as a whole.

Staff: Support Council decision making by providing examples of carbon reduction goals established in other communities. (Net Zero Cambridge, for example)

Council: Review and adopt broad carbon reduction goals for the City of Portland.

Action Item: Prepare the City for the effects of climate change including sea level rise.

Staff: Support Council decision making by providing examples of innovative climate adaptation plan from other communities. Inventory actions taken the City and community stakeholders to date.

Council: Review and adopt climate adaptation strategies for the City of Portland.

Energy Efficiency/Benchmarking:

Action Item: Increase energy efficiency of City buildings and facilities:

Staff: Benchmark the energy performance of City buildings using Portfolio Manager to create an Energy Star Score for each. Prioritize efficiency improvements in buildings with low scores compared to comparable buildings.

CITY OF PORTLAND, MAINE

Standing Committee on Energy and Sustainability

Councilor Jon Hinck (A/L), Chair

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Councilor Ed Suslovic (D3)

Conduct energy audits to identify efficiency improvements and opportunities for financial savings. Recommend funding mechanisms to implement such projects. Options include operating budgets, future CIP budgets, ESCO financing, or some combination of sources.

Council: Review and approve projects and associated funding mechanism which may include CIP expenditure and/or ESCO financing.

Action Item: Increase energy efficiency in commercial buildings and multi-family buildings

Staff: Explore opportunities to use existing economic development programs to support energy efficiency.

Work with multi-family building owners and property managers to find ways to make energy and utility costs more transparent to tenants.

Research the effectiveness of energy disclosure ordinances in other cities and make recommendations for Portland.

Council: Along with Portland Development Corporation, review and approve recommendations to use economic development funds to support efforts by businesses to improve energy efficiency

Review ordinance language regarding energy benchmarking and disclosure in commercial and multifamily buildings.

Action Item: Convert street lights to LED technology

Staff: Investigate converting City street lights to LED technology. Determine a possible scope of work, and the value of potential savings. If warranted, make recommendations for funding a capital project. Options may include inclusion in the CIP budget or some alternative such contracting with an energy services company

Council: Review and approve funding mechanism for a potential capital project.

CITY OF PORTLAND, MAINE

Standing Committee on Energy and Sustainability
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Councilor Ed Suslovic (D3)

Solar Power Development

Action Item: Take meaningful steps to achieve Mayor Strimling's goal that 25% of Portland businesses and homes use solar power within 10 years.

Staff: Pursue opportunities to site solar arrays on City property including roof tops and suitable open spaces.

Explore options to support community solar projects that will allow residents and businesses unable to place solar panels on their property to benefit from solar power.

Review zoning regulations and other policies that limit or prohibit deployment of solar panels. Offer recommendations for changes to the Council.

Review existing business assistance programs for opportunities to help with installation of solar panels.

Council: Pass a resolution outlining specific goals for renewable energy use by the City and establish targets for solar power use by homeowners and businesses.

Review and adopt code and policy amendments to facilitate installation of solar panels in the City.

Solid Waste and Recycling

Action Item: Modernize and improve the existing solid waste program.

Staff: Explore cart based collection systems utilizing automated equipment.

Continue to investigate options for comprehensive, city-wide collection and composting of organics.

Council: Review and approve program changes and associated funding necessary for implementation.

CITY OF PORTLAND, MAINE

Standing Committee on Energy and Sustainability

Councilor Jon Hinck (A/L), Chair

Councilor Spencer Thibodeau (D2), Vice Chair

Councilor Ed Suslovic (D3)

Pesticide Use

Ensure safe and effective management of turf and landscapes in the City of Portland

Staff: Limit use of pesticides and continue to employ BMPs outlined by the Maine Board of Pesticide Control when these products are used.

Engage with stakeholders from both sides of the issue.

Provide Council with information about operational impacts and costs associated with organic versus integrated pest management approaches to landscape and turf management.

Educate staff and residents about low impact practices of landscape and turf management.

Council: Receive and weigh public input on pesticide use. Review and adopt ordinance language governing the use and/or sale of chemical pesticides in Portland.

Community Education and Engagement

Action Item: Initiate a broad community outreach program to educate residents about City environmental programs and mobilize sustainable behavior

Staff: Explore creative ways to educate community members about sustainable behavior including energy conservation, waste reduction and recycling, and others. (Example: make better use of the inserts in City trash bags.)

Support efforts by neighborhoods to engage in sustainable initiatives such as neighborhood clean ups, tree planting, and leaf raking.

Utilize social media to engage the public with City programs.

Support efforts by community partners who offer environmental education and programs including The Resilience Hub, Greater Portland Sustainability Council, Cultivating Community, Portland Trails, and others.

Council: Engage with residents regarding sustainability goals. Provide staff with input and feedback regarding the efficacy of programs and outreach efforts.