

September 22, 2014

The Local 2020 Climate Action and T-Lab volunteer groups have prepared a set of proposed changes to the Jefferson County Comprehensive Plan. Suggested modifications were made on all chapters except:

- 06 Open Space
- 09 Essential Public Facilities (there may be elements of the comments on the Capital Facilities that also apply here)
- 11 Utilities (comments on water supplies, storm water, and energy efficiency are covered in other chapters, and so were not added here, but may also apply here)

The 10 Transportation Chapter was commented on by both the Local 2020 Climate Action Group (CAG) and the Local 2020 Transportation Lab (T-Lab) Group. The other chapters were commented on by the L2020 CAG.

Introduction:

COMPREHENSIVE LAND USE PLANNING

The Comprehensive Plan includes assessments of existing conditions containing baseline data for key areas. The data provide a "snapshot" of Jefferson County including:

- Existing land use patterns;
- Population projections and distribution trends;
- Inventories of historical and cultural resources;
- **Greenhouse gas emissions and the potential impacts of climate change on the natural and man-made environment;**
- Housing supply, conditions and affordability; and
- Critical areas located within the unincorporated portions of the County.

Commented [c1]: •This would include the existing [Jefferson County/Port Townsend Climate Action Plan](#) which has emissions data, and a placeholder for the Climate Change Preparation Plan in process via the preparing for climate change grant project

Planning Objective VI - Compliance with the Requirements of the Growth Management Act

Consistency with the thirteen goals of the Growth Management Act, the decisions of the Growth Management Hearings Boards, and the County-wide Planning Policy were used as a framework to develop a comprehensive compliance strategy.

Planning Objective VII – Addressing the Impacts of Climate Change

Being adjacent to the Strait of San Juan de Fuca, Hood Canal, and the Pacific Ocean, Jefferson County is vulnerable to sea level rise and other impacts of climate change. Already, ocean acidification linked to the increase in greenhouse gas emissions is creating challenges for the local shellfish industry. Other impacts that could affect Jefferson County are changes in precipitation, temperature, and extreme events, which can impact forests, agriculture, water supplies, aquaculture, etc.

Moreover, the Northwest may become a destination for people leaving other parts of the US where the effects of climate change (e.g. severe weather, flooding, droughts) are more significant. If that happens, the community needs to plan for more residents and how that trend will affect housing, infrastructure, and the local economy.

Urban Growth Area Elements:

URBAN GROWTH AREA

GOAL:

UGA-G 1.2 Within designated UGAs, encourage increased urban density through code revisions for items such as setbacks, height restrictions, cluster and mixed use development.

Commented [c2]: From [Jefferson County/Port Townsend Climate Action Plan](#) recommendation for Land Use/Urban Form

Natural Resource Conservation Element:

GOAL:

NRG 3.0 Conserve and protect Forest Resource Lands for long-term economic use.

POLICIES:

NRP 3.6 Consider climate change trends and projections as part of the sustainable management process for forest, agriculture, aquaculture, and mineral resources of Jefferson County.

NRP 3.7 Consider climate change impacts on forestry and take steps to improve forest health and resiliency through technical assistance, management of county owned lands, and support of neighborhood-based efforts to reduce risk of wildfire.

NRP 3.8 Consider collaborations with NOPRCD, WSU, Jefferson County Conservation District, and Olympic Nation Forest to assess likely impacts of climate change on agriculture, and to develop mitigation and adaptation strategies suited to Jefferson County soils and farm economy. Recommend that this information be made available through technical assistance and farm planning programs.

NRP 3.9 Research and report on the role of resource lands in supporting carbon sequestration.

Commented [C3]: These are from [King County Sample Climate Change-Related Amendments](#) and were modified slightly to reflect Jefferson County organizations and clarify language. Note that these same proposed additions are also in Chapter 3 - Land Use.

GOAL:

NRG 5.0 Encourage the continuation of forestry on lands which are not designated as commercial forest resource lands.

POLICIES:

NRP 5.1 Evaluate proposals for conversion of forest land through a public process to assess the long-term economic impact of decreasing the amount of land available for sustainable forest production and harvest, also considering long-term environmental stressors such as climate change.

Economic Development:

GOAL:

EDG 6.0 Encourage and support economic development for rural and urban lands.

POLICIES:

EDP 6.7 Conserve and enhance existing agriculture and encourage future innovative agriculture ventures and technologies while managing and sustaining the water and soil resources upon which they depend.

EDP 6.10 Manage streams, rivers, and riparian and shoreline habitat to maintain and sustain

productive fisheries and shell fisheries industries.

Formatted: Indent: Hanging: 1"

Transportation Element:

Relationship with Other Comprehensive Plan Elements

Transportation is highly dependent on many factors that are expected to change with a changing climate. Transportation strategies can contribute to the community's ability to adapt to a changing environment and to help minimize anthropogenic causes of climate change. Because the scientific knowledge and understanding of climate change is rapidly developing, the best available science, including trends and projections of important design criteria, will be used to implement this Transportation Element.

TRANSPORTATION ELEMENT STRATEGY

Jefferson County's strategy for managing its transportation network is to encourage efficient multi-modal transportation through implementation of the policies of the Transportation Element which address: the County's highways and arterials; public transportation needs and services; non-motorized transportation facilities; land development standards associated with the County's transportation network; state, regional, and local intergovernmental coordination; promotion of transportation demand management programs; protection of the environment and conservation of energy in transportation activities; projected changes in climate as they effect on all aspects of transportation; and development of a transportation improvement program that will identify and rank projects for funding.

Weather-Related Traffic Hazards

Inclement weather affects driving conditions, contributes to accidents, and can damage roadways. Higher elevation areas of some roads, such as Dosewallips and Duckabush Roads, are subject to freezing conditions. During periods of thawing, the Public Works Department installs signs informing travelers of load-limit restrictions, because heavy loads can damage the road structure. Some roadway segments require sanding during winter conditions, including Irondale Road, Flagler Road/Oak Bay Road intersection, SR 19 Beaver Valley

Road/Center Road/Chimacum Road intersection, Walker Mountain above 700 feet elevation, Dosewallips and Duckabush River Roads, and several roads in the Brinnon area. In addition, some roads are subject to flooding and washouts during storm events. These include the Oil City Road, Quinault-South Shore Road, and Upper Hoh Road. In the past few years, the Upper Hoh Road has experienced severe flooding and washout damage and has been totally closed on several occasions. **Changes in climate may cause weather related hazards to change in frequency and intensity as well as affect roadways that have had little impacts historically.**

NON-MOTORIZED TRANSPORTATION

GOAL

TRG 3.0 Provide safe, accessible and convenient routes, trails, parking facilities, trail heads, and other amenities that promote the use of non-motorized travel and increase the number of trips made by walking and bicycling in a manner that is integrated with other forms of transportation.

POLICIES

TRP 3.2 ~~Develop Encourage development of~~ a non-motorized transportation network between all major activity centers in Jefferson County in accordance with the Non-motorized Transportation and Recreational Trails Plan.

TRP 3.3 ~~Develop Encourage development of~~ new trails and linkages between trails in accordance with the Non-motorized Transportation and Recreational Trails Plan and in coordination with Federal, State, and regional agencies, utilities, and citizen groups

TRP 3.5 ~~Develop Promote~~ coordinated bicycle, equestrian, and pedestrian way improvements in accordance with the Non-motorized Transportation and Recreational Trails Plan, emphasizing access to schools, parks, employment and service centers, and mass transit facilities (ferry, bus, etc.).

TRP 3.11 Evaluate safety issues associated with pedestrian and bicycle travel near school sites, identify potential improvements and implement improvements for pedestrian and bicycle safety.

TRP 3.12 Encourage walking and bicycling to school by providing pedestrian and bicycle improvements and educational programs to promote walking and bicycling to school.

TRP 3.13 In developments in UGA's promote walking, bicycling and transit as an alternative to single occupancy automobile transport, by providing transit oriented development with safe pedestrian and bicycle improvements.

DEMAND MANAGEMENT

GOAL:

TRG 9.0 Promote Transportation Demand Management programs as a means of reducing traffic, minimizing environmental impacts including climate change, and optimizing existing transportation investments.

POLICIES:

TRP 9.1 Participate with state government, other government entities and transit agencies in developing, promoting, and facilitating a regional Transportation Demand Management program designed to reduce the number of vehicle miles travelled by commuters, residents and visitors that includes at a minimum the following:

- a. Encourage employers to reduce single-occupancy commuting; ~~to offer flexible work schedules that reduce peak period travel and lessen the need for roadway capacity.~~
- b. Assistance for visitors using publicity and assistive technologies for travel alternatives that reduce traffic;
- c. Assistance and incentives for residents to encourage alternatives to single-occupancy driving;
- d. Determination of targets for reduction in vehicle miles travelled and measurement of outcomes.

TRP 9.4 Incorporate the goal of reducing traffic into development and land use plans by encouraging densities and mixed uses together with multi-modal transportation options. ~~Participate with state government and transit agencies in developing, promoting, and facilitating regional ridesharing through such programs as parking management, and ride match services and preferential parking for carpools and vanpools.~~

TRP 9.5 Collaborate in opportunities to invest in short and long range technological solutions, and integrate those solutions into County transportation projects for managing demand.

TRP 9.6 Coordinate transportation technologies for managing demand among Peninsula jurisdictions, RTPOs and MPOs.

Commented [C4]: This is integrated into proposed new TRP 9.1

Commented [C5R4]:

ENVIRONMENT AND ENERGY

GOAL

TRG 10.0 Provide transportation facilities and services that are energy efficient, protect and enhance the environment, and preserve the existing residential quality of life.

POLICIES:

TRP 10.8 Evaluate all transportation projects for opportunities to adapt and mitigate the effects of climate change.

TRP 10.9 The county shall use coordinated land use and transit policies to work toward a goal of reducing fossil fuel-consumption resulting from vehicle miles traveled and encouraging transportation alternatives such as biking and walking, as intermediate measures of *climate change* mitigation

Commented [c6]: This is from the [King County Sample Climate Change-Related Amendments](#). Italics indicate minor tweaking of King County language.

TRANSPORTATION IMPROVEMENT PROGRAM

GOAL

TRG 11.0 Develop a transportation improvement program that is consistent with the Comprehensive Plan.

POLICIES

TRP 11.4 *The transportation improvement program shall* incorporate climate change impacts information into construction, operations, and maintenance of infrastructure projects

Commented [c7]: This is from the [King County Sample Climate Change-Related Amendments](#), with minor tweaks in italics.

STRATEGIES

Action Items

35. Identify culverts that impede fish passage and develop a schedule for replacement of these passageways as funding permits. (Corresponding Goal: TRG 10)

Review and revise design standards for stormwater management, slope stability, vegetation management, and other issues to incorporate data likely to be affected by climate change. (For example, a 25 yr – 24 hr storm event is likely to produce more precipitation and runoff requiring larger ditches and culverts associated with roadways.)

Land Use and Rural Element:

REVIEW OF SURFACE WATER CONDITIONS & EXISTING POLLUTED DISCHARGES

The County's review and analysis of drainage, flooding, stormwater runoff and water quality conditions and regulations revealed the following concerns warranting policy guidance within this element:

9. Though Jefferson County has adopted a Flood Damage Prevention Ordinance which largely prohibits development within floodways and requires flood-proofing of structures in floodplains, the County could take additional steps to reduce flood losses, facilitate more accurate insurance ratings, **take into account climate change trends and projections regarding flooding**, and promote the awareness of flood

insurance (i.e., through the Community Rating System or “CRS” discussed in LNG 26.0). The County adopted a Natural Hazards Mitigation Plan in 2004; one of the hazards addressed is flooding.

NATURAL RESOURCE LANDS

GOAL:

LNG 13.0 Conserve and manage the forest, agriculture, aquaculture, and mineral resources of Jefferson County for sustainable natural resource-based economic activities that are compatible with surrounding land uses.

POLICIES:

LNP 13.5 Consider climate change trends and projections as part of the sustainable management process for forest, agriculture, aquaculture, and mineral resources of Jefferson County.

LNP 13.6 Consider climate change impacts on forestry and take steps to improve forest health and resiliency through technical assistance, management of county owned lands, and support of neighborhood-based efforts to reduce risk of wildfire.

LNP 13.7 Consider collaborations with NOPRCD, WSU, Jefferson County Conservation District, and Olympic Nation Forest to assess likely impacts of climate change on agriculture, and to develop mitigation and adaptation strategies suited to Jefferson County soils and farm economy. Recommend that this information be made available through technical assistance and farm planning programs.

LNP 13.8 Research and report on the role of resource lands in supporting carbon sequestration.

Commented [C8]: These are from [King County Sample Climate Change-Related Amendments](#) and were modified slightly to reflect Jefferson County organizations and clarify language. Note that these same proposed additions are also in Chapter 3 - Land Use.

ENVIRONMENT

GOAL:

LNG 14.0 Preserve the functions and values of critical environmental areas and protect development from the risks of environmental hazards.

POLICIES:

LNP 14.6 Develop land use ordinances based on comprehensive watershed plans, climate change trends and projections, and salmon recovery plans for the conservation, protection, and management of surface and ground waters, in order to maintain water quality and quantity, provide potable water, and to restore and protect fish habitat.

GOAL:

LNG 21.0 Encourage residential land use and development intensities that protect the character of rural areas, avoid interference with resource land uses, and minimize impacts upon environmentally sensitive areas.

POLICIES:

LNP 21.3 Increase tree planting requirements or incentives for all public and private projects, including transportation projects that incorporate the use of trees. Tree lined corridors provide a carbon sponge and increase the attractiveness of the area.

Commented [c9]: This is a recommendation from the [Jefferson County/Port Townsend Climate Action Plan](#) for Land Use

GOAL:

LNG 22.0 Foster sustainable natural resource-based industry in rural areas through the conservation of forest lands, agricultural lands, mineral lands, and aquaculture lands in order to provide economic and employment opportunities that are consistent with rural character.

POLICIES:

LNP 22.4 Increase investment in local wood manufacturing businesses that are able to supply local products for wood markets.

LNP 22.5 Increase the amount of local wood products grown and manufactured locally and purchased by government and private sectors. Thus encouraging the economic viability of forest land in our area.

Commented [C10]: This is a recommendation from the [Jefferson County/Port Townsend Climate Action Plan](#) for Land Use

Housing Element:

GOAL:

HSG 2.0 Promote a variety of affordable housing choices throughout the County through the use of innovative land use practices, development standards, design techniques, and building permit requirements.

POLICIES:

HSP 2.10 Encourage the use of new housing technologies that help conserve resources and minimize the generation of greenhouse gas emissions.

HSP 2.10 Encourage the development of residential generation of electricity through renewable resources such as solar.

HSP 2.10 Encourage energy efficiency in both new and existing houses, and the development of "zero net energy" housing.

HSP 2.10 Encourage residential water conservation technology, including rain barrels, gray water systems for non-potable uses, and low-water use appliances.

HSP 2.11 Direct staff to research the benefits of implementing a city and county energy code for commercial and residential construction that exceeds current WA state code (e.g. greater insulation, passive solar, Passive House and small footprints) and for new buildings, site development and substantial remodels consider establishing a minimum compliance target (e.g., meet at least a LEED Silver or similar level for Built Green or another green building standard).

Commented [c11]: This is from [Jefferson County/Port Townsend Climate Action Plan](#) recommendation for Land Use/Urban Form

Environmental Element:

WATER RESOURCES

GOAL:

ENG 1.0 Manage, protect, enhance, and conserve water resources through a comprehensive watershed management program that is integrated with recovery plans for fish species proposed for listing under the ESA.

POLICIES:

ENP 1.3 Manage water resources using the best available scientific information and participate in collaborative processes to develop new information. Recognize that scientific knowledge and information is rapidly developing in natural resource areas affected by climate change. Periodic and frequent evaluation of this information may be necessary to achieve water resource management goals.

GOAL:

ENG 3.0 Ensure a sustainable and safe water supply as a critical necessity for residential, economic, and environmental needs.

POLICIES:

ENP 3.1 Work with the Water Utilities Coordinating Committee to revise the Coordinated Water System Plan for consistency with the Comprehensive Plan, in order to provide a safe and adequate water supply for County residents and other uses in balance with the protection of environmental functions of water resources, and under changing climate conditions.

GOAL:

ENG 5.0 Allow development along shorelines which is compatible with the protection of natural processes, natural conditions, and natural functions of the shoreline environment.

POLICIES:

ENG 5.0 The County has used best available information to devise and implement a sea level rise strategy.

- ENP 5.1 Evaluate all options, including retreat, to deal with the impacts of sea level rise in *Jefferson County*.
- ENP 5.2 Consider different scenarios for varying amounts of sea level rise *and storm surge*, and the accompanying adaptation response options for each scenario.
- ENP 5.3 Perform a cost-benefit analysis for each adaptation strategy. Consider the physical, environmental and social factors, *and timing*, as well as costs in the analysis.
- ENP 5.4 Evaluate different financing options for adaptation strategies.
- ENP 5.5 Use the best available science and the experiences of other municipalities in formulating future plans for sea level rise.
- ENP 5.6 Engage the community in a discussion of the *different adaptation strategies* and response and cost.

GOAL:

ENG 11.0 Protect flood hazard areas from development and uses that compromise the flow, storage and buffering of flood waters, normal channel functions, and fish and wildlife habitat and to minimize flood and river process risk to life and property.

POLICIES:

ENP 11.7 Storm water management plans should minimize adverse effects of floods on existing and future development and protect the natural conditions and functions of the flood plain. *Anticipate the need to expand areas managed as flood plain with increases in precipitation intensity, streamflow, and other hydrologic characteristics consistent with climate change expectations.*

STRATEGIES

A. WATERSHED MANAGEMENT AND HABITAT RECOVERY STRATEGY

Jefferson County’s strategy for management of environmental resources will be conducted in the context of a collaborative watershed management approach to the interrelated functions of the resources, in order that land use activities are consistent with plans for the recovery of fish species listed as threatened or endangered under the Endangered Species Act. *The strategy will consider the effects of a changing climate on watershed functions to ensure that water resource and habitat goals are achieved.*

- 6. *Work with the City/County Climate Action Committee to identify the most current and relevant information on the aspects of climate change affecting land use activities and watershed resources.*

C. CRITICAL AREAS STRATEGY

- 10. *Recognize that the scientific data supporting critical area planning and management is changing with a changing climate and incorporate the most recent information when reviewing critical area management plans and regulations.*

Commented [C12]: These are from the [City of Olympia Comprehensive Plan \(draft\)](#). Italics are minor recommended tweaks to Olympia language

Commented [c13]: This has not yet been reviewed with the CAC, but can be considered there in a future meeting.

Capital Facilities:

GOAL:

CFG 2.0 **Implement a Six-Year Capital Facilities Concept Plan that ensures that County-owned public facilities meet the established Levels of Service.**

POLICIES:

- CFP 2.11** Update the expected frequency and severity of flooding events (storm, tidal, sea level rise) due to climate change on a regular basis.
- CFP 2.12** Update stormwater plans to reflect the impacts of climate change.
- CFP 2.12** Update information on potential climate change impacts on capital facilities as part of the Six Year Plan, and use that information to (1) validate the function and useful life of existing facilities and (2) plan appropriately for new facilities.