



Immediate Action Working Group Hearing: Cascadia Regional Green Building Council

*Remote Rural Villages
Sustainable Communities*

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WHAT IS CASCADIA?

The Cascadia Region Green Building Council is the leading green building organization in the Pacific Northwest and Alaska concerned with making change in the built environment for positive environmental impact. We bring a unique perspective to green building by taking a bioregional approach to problem solving and market transformation.



Starting in 2007, Cascadia's members have developed the first comprehensive evaluation system promoting the development of sustainable communities – the Living Community Challenge.



Cascadia's Vision for Living Communities

The purpose of the Living Site and Infrastructure Challenge is to define the highest measure of sustainability possible in the built environment for non-building infrastructure. With this standard, Cascadia hopes to encourage a dialogue about the necessary evolution of the landscape, civil and planning industries and engender support for the Living Sites and Infrastructure projects.

We hope this program will drive the creation of infrastructure projects that integrate with the natural environment from the outset and represent regional, scale-appropriate responses to project objectives.

To the extent to which we redefine how our communities are designed in **balance** with natural systems will be a measure of our progress in mitigating the global impacts of resource use.





2007 Strategic Partnerships with Communities and Organizations

Betterbricks
City of Eugene, OR
City of Portland
City of Seattle
City of Tacoma
City of Vancouver
University of Oregon
Energy Star Homes Northwest
Energy Trust of Oregon
Eugene Water and Electric Board
King County WA
Earthshare of Washington

Metro Regional Government, OR
Oregon Natural Step Network
Oregon State University
PacificCorp
Portland General Electric
Urban Green
Urban Land Institute
Washington Public Schools
Washington State
Construction Specifiers Institute
American Planning Association
American Institute of Architects
ASHRAE





The key to Cascadia's approach to Sustainable Building Design and Sustainable Community design is observation.



A truly Sustainable community depends on a built environment fabric that strengthens culture and community for all individuals.

Patterns of community infrastructure decay such as this collapsed boardwalk reveal damage from flooding, thawing permafrost, over use by ATVs, and maintenance issues.

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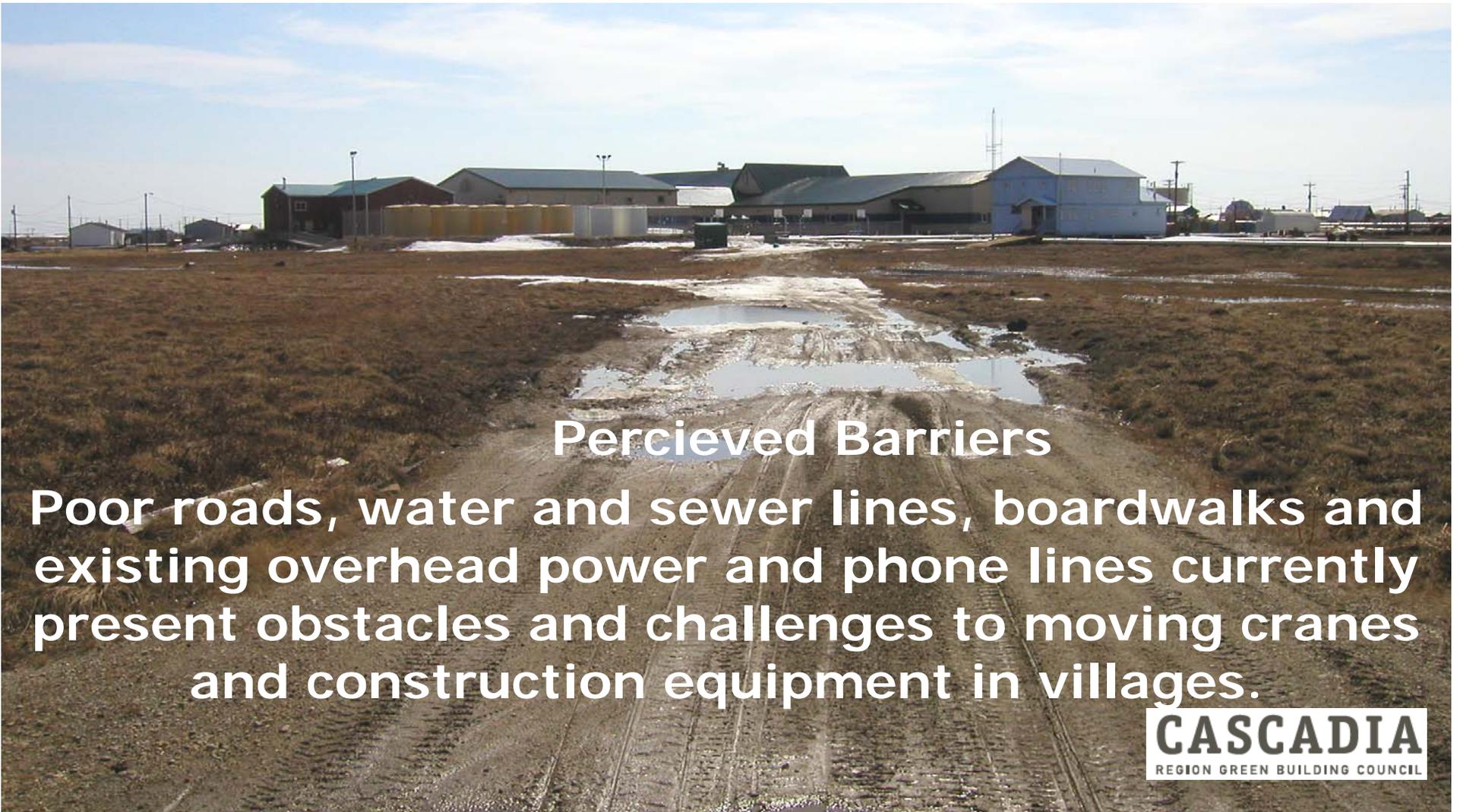


Cascadia has over 6,000 members, many of whom are the brightest problem solvers in the field of sustainable design, who can be tapped through Cascadia's status as a 501(c)3.



**Low Impact
Community
Infrastructure
of Alaskan
Villages.**

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Percieved Barriers

Poor roads, water and sewer lines, boardwalks and existing overhead power and phone lines currently present obstacles and challenges to moving cranes and construction equipment in villages.



Perceived barriers to community infrastructure design are often opportunities for sustainable choices . . .

Contractor-identified barriers affecting cost:

- Lack of roads.
- Equipment and supplies must be transported by air or barge.
- Less options during the winter months.
- Short runways limit payload.
- Weather delays on aircraft and barge travel
- Projects can be more economical when combined with other projects that have heavy equipment or cranes onsite.



Cascadia can provide a comprehensive checklist-based review of economic infrastructure.



An example of physical infrastructure in a vulnerable environment that is a fundamental part of community enjoyment and health.

Economic infrastructure that supports and protects low-impact design is based on inspection and maintenance programs that identify weaknesses before they become failures.

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Cascadia can identify policy factors influencing sustainable infrastructure choices that help communities grow by removing resource sinks.



Community Infrastructure
(AVEC – Toksook Bay)



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Cascadia can help communities to identify scale-appropriate community infrastructure.

Solutions that do not present expensive obstacles are available.

- ATV Trail Hardening, Hooper Bay

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Cascadia can provide research and examples of low impact construction techniques.



Improving access and interpretation at an internationally important peatland in the UK in which a Contractor Working Group identified this construction technique as the best solution given project conditions.

- Construction of a floating aggregate path.
- Sections were flown out by helicopter.



The Challenge of Village Sustainability



For village and town alike, our buildings and landscape infrastructure are among the largest human artifacts that we create. They both define and represent our cultural values, and in turn our values influence how our built environment is designed, used, modified and either preserved or abandoned.

The built environment is the armature on which community exists.



The Challenge of Village Sustainability



Since ancient times, village communities were organized around the scale and accessibility of the human being and areas of tundra and sea delineated by walking, dog sled, and kayak: the result being village sites that were inherently walkable, human-scaled and supported by local and regional economies for food and transportation.



The Challenge of Village Sustainability



In Alaska, a relationship between remote civilizations and cities has established patterns of dependency, creating a model of us and them, city and bush. In scrutinizing the relationship with village landscapes, sites and infrastructure, it is clear that the quality of the built environment and its capacity to serve as a healthy armature for village culture and community is constantly being eroded in a way that exacerbates the differences between us. This trend must be reversed.



We imagine our villages and towns to be places where each intervention (new construction or redevelopment) helps to reinforce a vibrant, healthy community. Environmental stewardship is only possible when a healthy community infrastructure is present.



We envision communities that have strong local economies and are self sufficient on a regional scale. We envision communities where reliance on fossil fuels for commerce, energy and locomotion is not required. We imagine communities that inspire, bring people together and promote co-operation and healthy relationships.



Vision drives change.



Questions?



FROM LIVING
BUILDINGS TO
LIVING COMMUNITIES
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