

---

---

# Whatcom Wind Code Update

Climate Impact Advisory Committee  
August 18, 2022

---

---

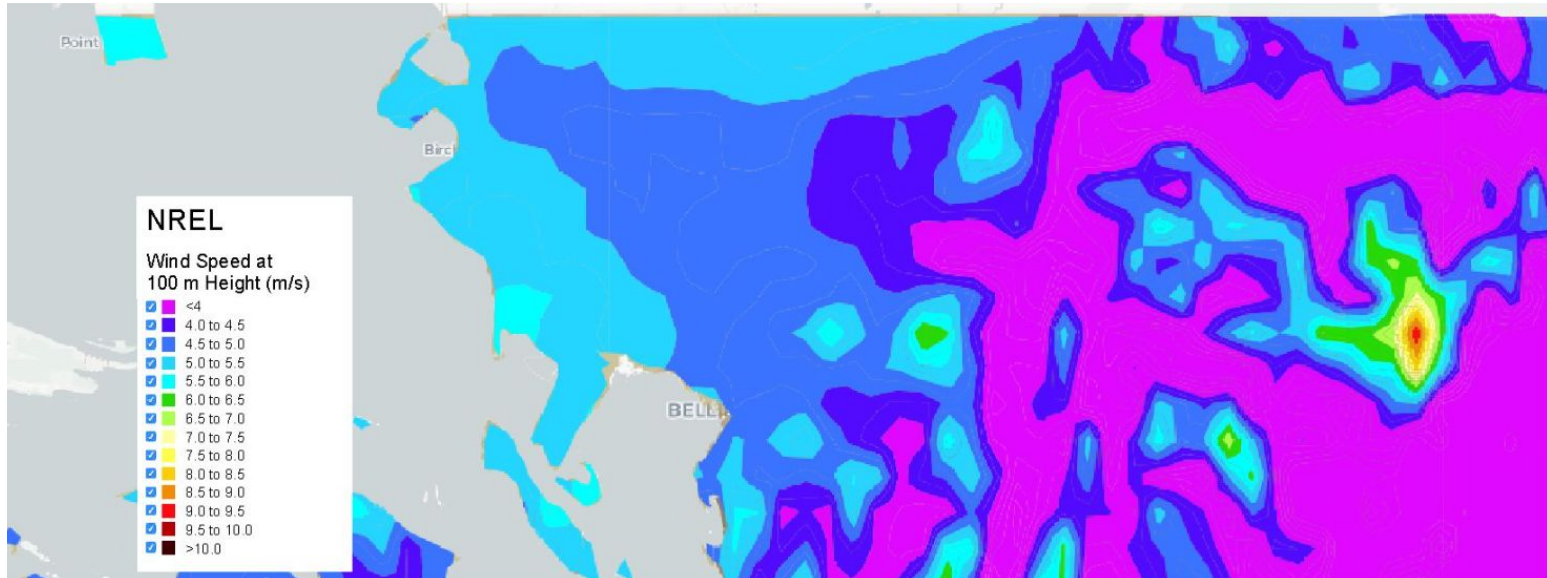
# Process

- CIAC recommends draft amendments
- Planning Commission takes public input, reviews (Level III process), revises and recommends draft
  - Town Hall and Public Hearing
- County Council reviews and finalizes
  - Final public hearing before adoption

# Background

1. Wind technology is developing rapidly and costs are declining
2. Whatcom county has a moderate wind resource, but there are developable sites
3. Whatcom's current wind turbine zoning code (WCC 20.14, adopted 2012) is overly restrictive
  - a. ¼ mile setback to property line
  - b. Height restrictions
  - c. Onerous sound limits & requirements
  - d. Large Wind Energy Systems only permitted in HII zone (Cherry Point)

# Wind Resource Potential in Whatcom County



- Wind speed range of 5 to 6 m/s in coastal area
- Hilltop wind speed range of 7-8 m/s
- \*Columbia Gorge area WES turbine systems utilize wind speed of 7.5 - 8.5 m/s

## Wind tech is advancing rapidly; costs declining

*Upper tip heights were  
~105 m in 2003 and now  
can exceed 180-m.*



	<u>2003</u>	<u>2008</u>	<u>2013</u>	<u>2019</u>
Rotor Dia.(m)	50-75	70-100	80-110	100-150
Rated Power (MW)	0.75 -1.5	1.0-1.8	1.7-2.5	2.0-4.5
Typical NCF (%)	25-35	30-40	35-48	40-55

As wind turbines have grown, the cost of wind energy has dropped.  
Costs are down >50% over the past 10 years

# Summary of Proposed Amendments

- Defined Small Energy Wind Systems (SWES) up to 100kw capacity; and Wind Energy Systems (WES) greater than 100kw capacity
- SWES Permitted in all zones
- WES permitted in industrial zones, Conditional Use Permit in Ag & Forestry zones
- No height limit except as imposed by FAA or local airport protection zones
- Minimum setback reduced to 1 x MTH in HII, or 1,000 feet outside HII
- Must satisfy sound limits of the zoning district where it is located.
- Condensed sections, clarified language
- Wildlife Protections, Avian & Bat impact studies and mitigation

# Wildlife Impact Risks

- Protect at-risk species
  - Marbled Murrelet
  - Spotted Owl
  - Bald Eagle
  - Bats and other Birds
- Require studies pre-application, appoint technical advisory committee, minimize impacts via project design, analyze impacts in SEPA process, require mitigations as appropriate

# Additional Steps

- Recommend County fund study and consider identifying an **overlay zone** for Wind Energy System permitting where impacts/risks are minimized
- Continue consultations to improve provisions for wildlife protection
- Take input and address concerns in public review process