# Big Tent Committee: Sustainability Plan Overview

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## Agenda

#### Presentation (20 minutes)

- Sustainability Plan overview: vision, timeline, drivers, scope
- Greenhouse gas emissions & sustainability baselines
- Greenhouse gas emissions & sustainability goals
- Next steps

Questions & Comments (10 minutes)



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## Climate Change at WDFW

#### Resilience

- Climate Action Team
- Key documents: climate risk report, climate resiliency plan
- Project example: resizing culverts to accommodate higher peak flows

Resilience (aka adaptation): Preparing for climate change impacts

Sustainability (aka GHG reduction):
Reducing greenhouse gas emissions

harchery ponds

#### Sustainability

- Sustainability Team
- Key document: sustainability plan
- Project examples: transitioning to electric vehicles, increasing recycling

corest restoration

#### Sequestration

- Key document: UW graduate student report
- Project example: changing agricultural practices to increase soil carbon

Sequestration: Increasing carbon stored in plants and soils





# **Sustainability Plan Overview**

#### Sustainability Plan Vision & Objective

Vision: WDFW is a leader that sets the example for environmental sustainability among state agencies.

Objective: The Sustainability Plan will lay out strategies and actions WDFW can implement to reduce the agency's environmental impact by reducing greenhouse gas (GHG) emissions and increasing sustainability.





#### Sustainability Plan Timeline

2021			2022					
Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	

Scoping: cross-program team and consultants

Baseline: measure and forecast GHG emissions and sustainability impacts

Baseline Forecast & memo

Strategy development: brainstorming and prioritization

Strategy list

Staff engagement: program presentations, all-staff survey

Plan development: effectiveness and cost modeling, writing

Modeling & draft plan

EMT & Commission engagement

EMT: Project intro

EMT: Goal-setting

Big Tent: Project intro

EMT & Big Tent/Commission: Plan review



## Project Driver – WDFW Strategic Plan

WDFW | 25-Year Strategic Plan Draft

Model operational and environmental excellence

#### **Near-term Actions**

WDFW will seek policy and funding necessary to prioritize these actions over the next four years.

- Adapt decision making based on publicly shared performance goals and indicators.
- 2. Increase decision transparency to both internal and external audiences.
- Expand ways for the Fish and Wildlife Commission to connect with residents.
- Support the recommendations of employee resource groups and the Department's internal Diversity Advisory Committee.
- 5. Track workforce diversity, equity, and inclusion measures.
- Assess the need and identify actions to improve cross-program/region collaboration.
- Develop measures for strengthening employee satisfaction and adopting best practices for staff retention and advancement.
- Develop and implement a WDFW sustainability plan that includes actions to minimize our carbon footprint, maximize carbon sequestration, and achieve more net ecological gain.
- 9. Develop a culture that supports physical and emotional safety.



#### Project Driver - Statutory Requirements

House Bill 2311 (2020) requires us to:

Report and reduce
 GHG emissions from
 facilities electricity,
 facilities natural gas,
 and fleet below
 2005 levels 15% by
 2020, 45% by 2030,
 70% by 2040, 95%
 by 2050



 Submit a report every two years starting June 1, 2022 describing our short- and long-term strategy to achieve the above



## Scope: Going Above and Beyond

#### We are <u>required</u> to reduce GHG emissions from:

- Facilities electricity and natural gas
- Fleet

# We also want to <u>voluntarily</u> reduce GHG emissions from:

- Employee commuting
- Business travel
- Hatchery fish digestion

#### And <u>voluntarily</u> increase sustainability by:

- Reducing solid waste
- Conserving water
- Reducing our use of toxic chemicals
- Reducing the impact of the products we buy







# Sustainability Plan Overview – Questions?



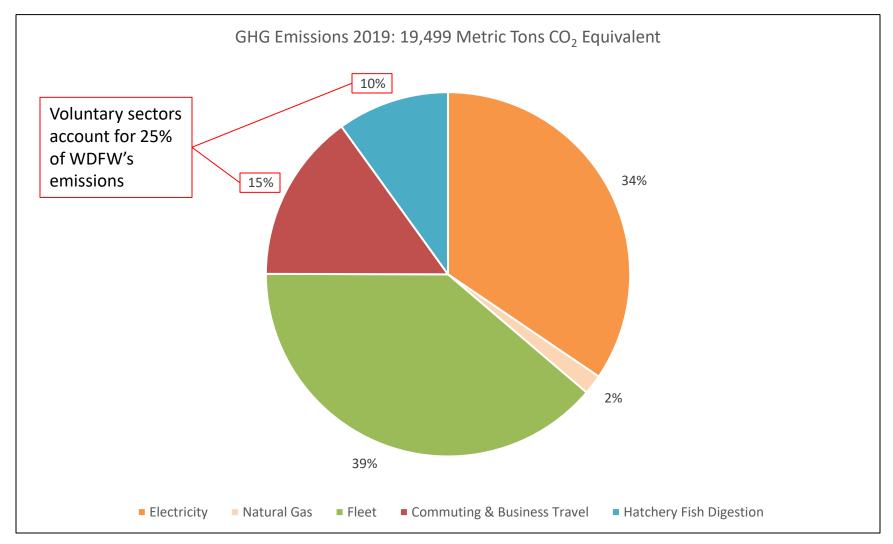
# Greenhouse Gas Emissions & Sustainability Baselines

#### Greenhouse Gas Emissions Baseline

- "Baseline" refers to our emissions in a certain year that goals are set against, e.g. statutory goal to reduce emissions below 2005 baseline 45% by 2030, etc.
- Annual reporting allows us to track progress towards goals
- Two information sources on our greenhouse gas emissions:
  - 1. Mandatory reporting to Department of Ecology
  - 2005 baseline; annual reports 2010-2020
  - Only covers mandatory sectors (electricity, natural gas, fleet)
  - Data quality is unreliable
  - 2. Updated baseline recently completed with consultants
  - 2019 baseline; no annual reports yet
  - Covers mandatory and voluntary sectors (commuting, business travel, hatchery fish digestion)
  - Data quality is high

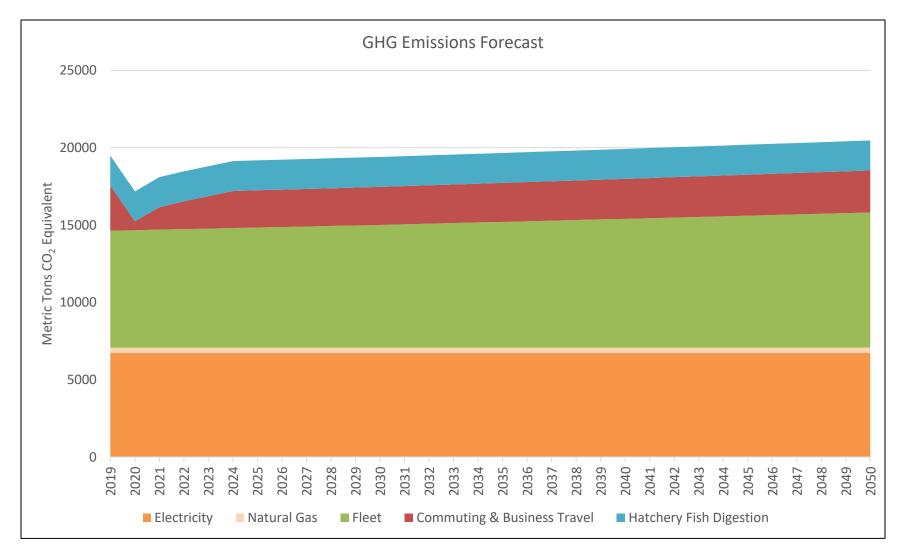


#### Greenhouse Gas Emissions Baseline



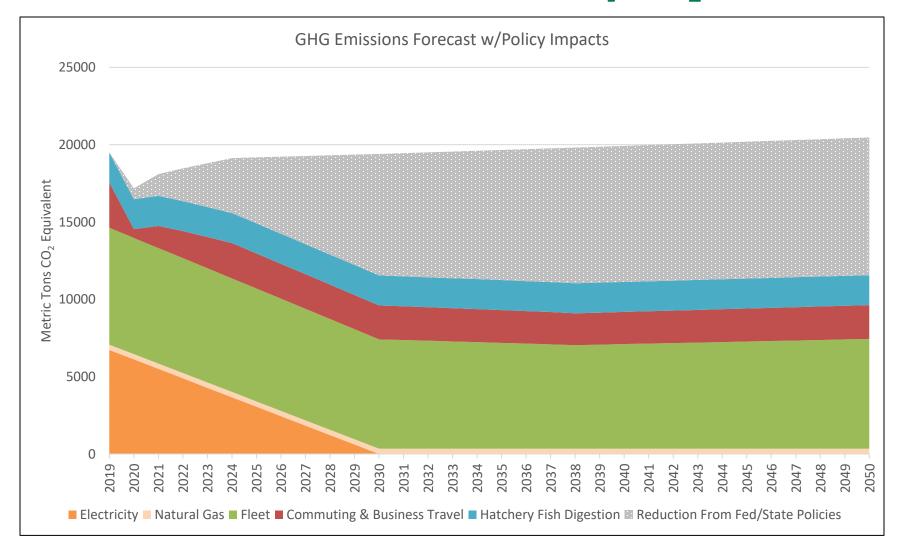


#### **Emissions Forecast If No Action Is Taken**





#### **Emissions Forecast With Policy Impacts**





#### Sustainability Baselines & Data Gaps

#### Also set 2019 baselines for:

- Facilities water use
- Solid waste (trash & recycling)
- Lifecycle carbon footprint of purchased materials case study approach with 6 materials (concrete, paper, computers, etc.)

Data gaps – collecting data to set baselines for these activities proved difficult, but the Sustainability Plan will still include strategies to address these activities:

- Toxic chemicals
- Refrigerant gases in HVAC systems, refrigerators, freezers
- Contractors' fuel and material use
- Volunteers' fuel use
- Public's fuel use fishing/hunting/recreating at WDFW sites





# Greenhouse Gas Emissions & Sustainability Baselines – Questions?



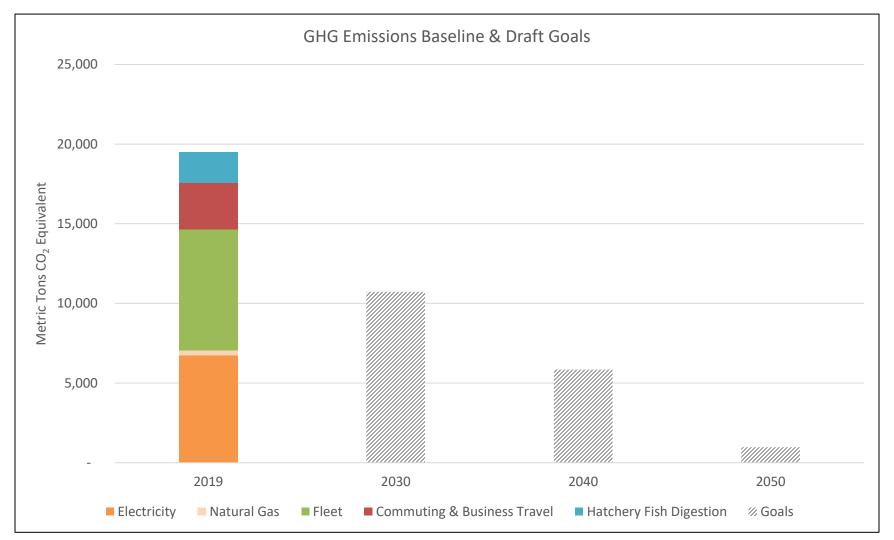
# Greenhouse Gas Emissions & Sustainability Goals

## Approach to Goals

- Reporting to Ecology will continue to use statutory goals for mandatory GHG sectors (electricity, natural gas, fleet):
  - Reduce below <u>2005</u> baseline 45% by 2030, 70% by 2040, 95% by 2050
- Set Sustainability Plan goals for both mandatory GHG sectors and voluntary GHG sectors (commuting, business travel, hatchery fish digestion):
  - Reduce below <u>2019</u> baseline 45% by 2030, 70% by 2040, 95% by 2050
  - Rationale: 2005 baseline data is unreliable; it makes sense to use the same baseline for all Sustainability Plan goals
- Set Sustainability Plan goals for sustainability sectors (water, solid waste, materials)

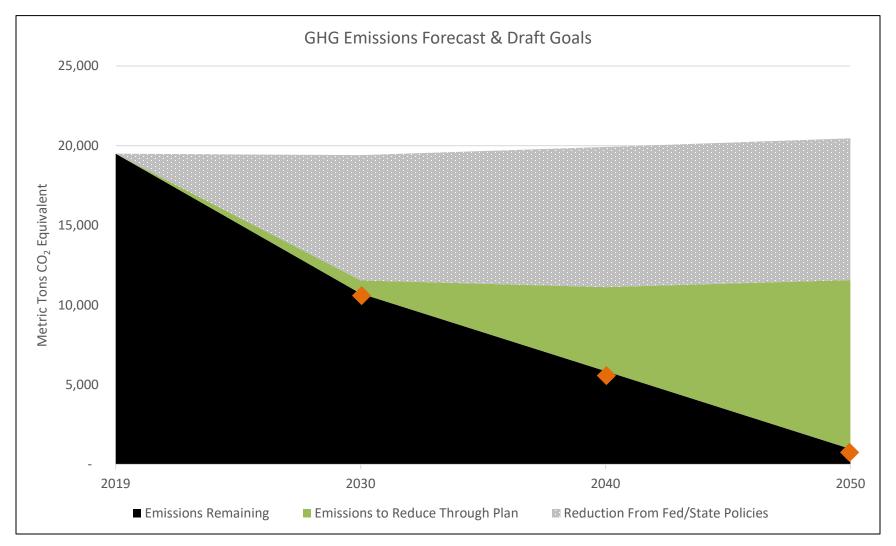


#### **Emissions Baseline & Draft Goals**





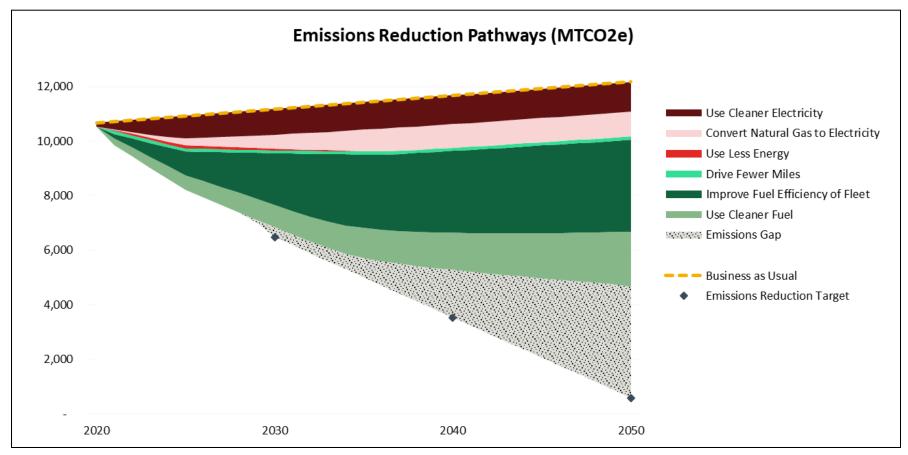
#### **Emissions Forecast & Draft Goals**





# Example of Sustainability Plan Modeling

#### WA DNR GHG Reduction Strategy





## Top Priority Actions for Modeling

- Facilities: reduce energy use, transition to renewable energy
- Fleet: transition to electric where possible, transition to alternative fuels where electric is not possible, increase fuel efficiency, reduce miles traveled
- Commuting & business travel: reduce commute days, encourage sustainable commute modes, reduce business flights
- Hatchery fish digestion: research and implement approaches to reduce nitrous oxide emissions



## Sustainability Baselines & Draft Goals

Sector	2019 Baseline	2030 Goal	2040 Goal	2050 Goal
Facilities water use - Reduce by:	42.1 million gallons	-10%	-20%	-30%
Solid waste - Increase waste diversion (recycling) rate to:	18%	40%	60%	80%
Purchased materials - Reduce by:	1,279 metric tons CO <sub>2</sub>	-10%	-20%	-30%





# Greenhouse Gas Emissions & Sustainability Goals – Questions?



# **Next Steps**

#### **Next Steps**

Spring: Executive Management Team

Review draft plan

Summer: Big Tent Committee and Commission

Review draft plan

#### Throughout 2022:

Build top priority implementation actions into 23-25 biennial budget



# **Questions or Comments?**

