Comments on HB 2488

Ken Adee, 3/17/2021

While I am supportive of HB 2488, I have concerns regarding the framing of the issues that are addressed in the category "climate change adaptation and mitigation". The focus should be on maintaining healthy ecosystems. Climate change is not the only threat.

Protecting diverse ecosystems and the natural benefits that they provide is essential to the future of life on our planet and the well-being of humanity. Ecosystem services, include providing resources such as food and water, maintaining habitats that support biodiversity, offering opportunities for recreation, and helping to regulate human-caused impacts like climate change. Healthy, diverse ecosystems are responsible for the air we breathe, the food we eat, and the natural places that we visit to nurture our bodies and minds. They support the species that, in turn, sustain human life. "Every morsel of food, every sip of water, the air we breathe is the result of work done by another species," says Enric Sala, a National Geographic Explorer-in-Residence and the leader of National Geographic's Pristine Seas Initiative. "Without them, there is no us." Over the past 50 years the precipitous trajectory of the degradation of our terrestrial, aquatic and marine ecosystems is threatening life on this planet. Land use changes to extractive practices are not sustainable. Industrial farming, forestry and fishing practices are as much a threat to our survival as climate change.

When it comes to mitigating the impacts of climate change, ecosystem services really shine. Studies have shown that the natural world can provide one-third of all climate mitigation efforts. Land and marine ecosystems currently absorb about half of the human-generated carbon dioxide emissions, with forests alone removing 2.6 billion tons of carbon from the atmosphere each year.

Ecosystems must stay intact and healthy to receive the myriad of benefits that they provide. There is a conflict: people need to use natural capital for their economic and overall welfare, and ecosystems require natural capital to remain healthy. To be successful we must integrate economic based resource extraction practices with maintaining the ecosystem services and natural capital that sustains us.

The following text (with minor edits) is from "Natural capital and ecosystem services informing decisions: From promise to practice", PNAS June 16, 2015 112 (24) 7348-7355.

The central challenge of the 21st century is to develop economic, social, and governance systems capable of ending poverty and achieving sustainable levels of population and consumption while securing the life-support systems underpinning current and future human well-being. Essential to meeting this challenge is the incorporation of natural capital and the ecosystem services it provides into decision-making. Essential to meeting this challenge is the incorporation of natural capital and the ecosystem services it provides into decision-making. The three key dimensions of progress and ongoing challenges are:

- 1. Raising awareness of the interdependence of ecosystems and human well-being,
- 2. Advancing the fundamental interdisciplinary science of ecosystem services, and
- 3. Implementing this science in decisions to restore natural capital and use it sustainably.

Awareness of human dependence on nature is at an all-time high, the science of ecosystem services is rapidly advancing, and talk of natural capital is now common from governments to corporate boardrooms. However, successful implementation is still in early stages. Ecosystem service information has yet to fundamentally change decision-making and suggest a path forward that emphasizes: (i) developing solid evidence linking decisions to impacts on natural capital and ecosystem services, and then to human well-being; (ii) working closely with leaders in government, business, and civil society to develop the knowledge, tools, and practices necessary to integrate natural capital and ecosystem services into everyday decision-making; and (iii) reforming institutions to change policy and practices to better align private short-term goals with societal long-term goals.