**SMART Review Comments of Janet McGowan**

The SMART incentives must align with 2024 realities and our state climate action policies and plans-- not undermine them. The *Clean Energy and Climate Plan for 2050,* the *Resilient Lands Initiative,* and Mass Audubon’s *Growing Solar, Protecting Nature* balance climate mitigation and climate resilience by protecting our Commonwealth’s Natural and Working Lands --- our forests, wetlands, and farmlands that produce food, wood products, oxygen, sequester carbon, cool air, provide wildlife habitat, water recharge, and prevent flooding, among many other benefits. We need these Natural and Working Lands.

**Forest Protection--**Massachusetts is losing forests to development and solar arrays are a significant aspect. In the past 10 years, over 50% of large ground-mounted solar arrays have been constructed on previously forested land. Increased forest carbon sequestration and storage are vital to offset residual emissions if we are to reach our 2050 net-zero emissions goal. Hillside forests help retain and slow the release of water into streams and rivers following heavy rains. Forest buffers also act as natural filters, slowing infiltration of the water and filtering out contaminants and excess sediment. The natural filtering helps protect our private and public water supplies and preserves water for the future.

**Farmland --** We are losing farmland needed for food production, economic development, wildlife habitat and climate resilience. Our valuable prime farmland must be protected. Extreme weather is impacting global food production. Dual-use (Agrivoltaics) is a promising approach, with more data on crop yields and best practices needed.

**SMART** **GOALS and INCENTIVES**

***Incentives must be directed to promote solar development on disturbed land (landfills, brownfields, gravel pits, etc.) and in the built environment***, ***particularly parking canopies—not at cutting forestlands and taking farmland out of production. The SMART program needs to implement, not contradict, our new Commonwealth policies of protecting and increasing our forests and farmland.***

**Parking Canopies**

Solar canopies above paved parking lots are an ideal means of significantly expanding solar energy in Massachusetts without large negative impacts. Canopy solar is more expensive than ground-mounted solar. SMART incentives are urgently needed to encourage the maximum amount of solar canopies over commercial parking lots, such as shopping malls, grocery stores, city parking lots, as well as schools, colleges, municipal areas.

**Create strong, valuable Adders for:**

Parking Canopies

Brownfields, landfills,

Rooftops: commercial, municipal, residential

**Remove all Adders for:**

BioMap3 Core Habitat, Priority habitat, etc.

Forest Clearing

Prime Farmland

Community Solar

**No Adders/ financial incentives for solar arrays on land designated as Core Habitat and Critical Natural Landscapes on Massachusetts GIS BioMap3 (2022) or on land designated as Priority Habitat or Estimated Habitat as defined by Massachusetts Endangered Species Act (MESA).** The SMART program must stop subsidizing damage solar arrays on lands it is now the Commonwealth’s policy and plan to protect.

**No Adders or incentives for arrays requiring forest clearing larger than 5 acres.** Large intact tracts of forest are necessary for carbon sequestration and storage, flood control, biodiversity, wetland protection and other services. The SMART program is undermining state policy on Natural Working lands (and is subject to court challenge).

**No Adders or incentives for ground-mounted arrays on prime farmland without dual use or mitigation (below).**

**Land that categorized as Prime Farmland or Farmland of Statewide Importance, any LGPI that is over 3 acres in size shall be protected from large scale solar developed, unless it operated as an Agrivoltaics Array,** meeting the definition of ASTGU (Agricultural Solar Tariff Generation Units) of the Massachusetts SMART program or successor programs Substitution of other agricultural uses, such as grazing, on prime farmland currently growing food crops when installing Agrivoltaics should be prohibited, unless an equal or larger acreage of prime farmland not currently being used for farming, is converted to the growth of food crops.

**No Adders: NO adders for Community Solar on forested and prime agricultural land.**