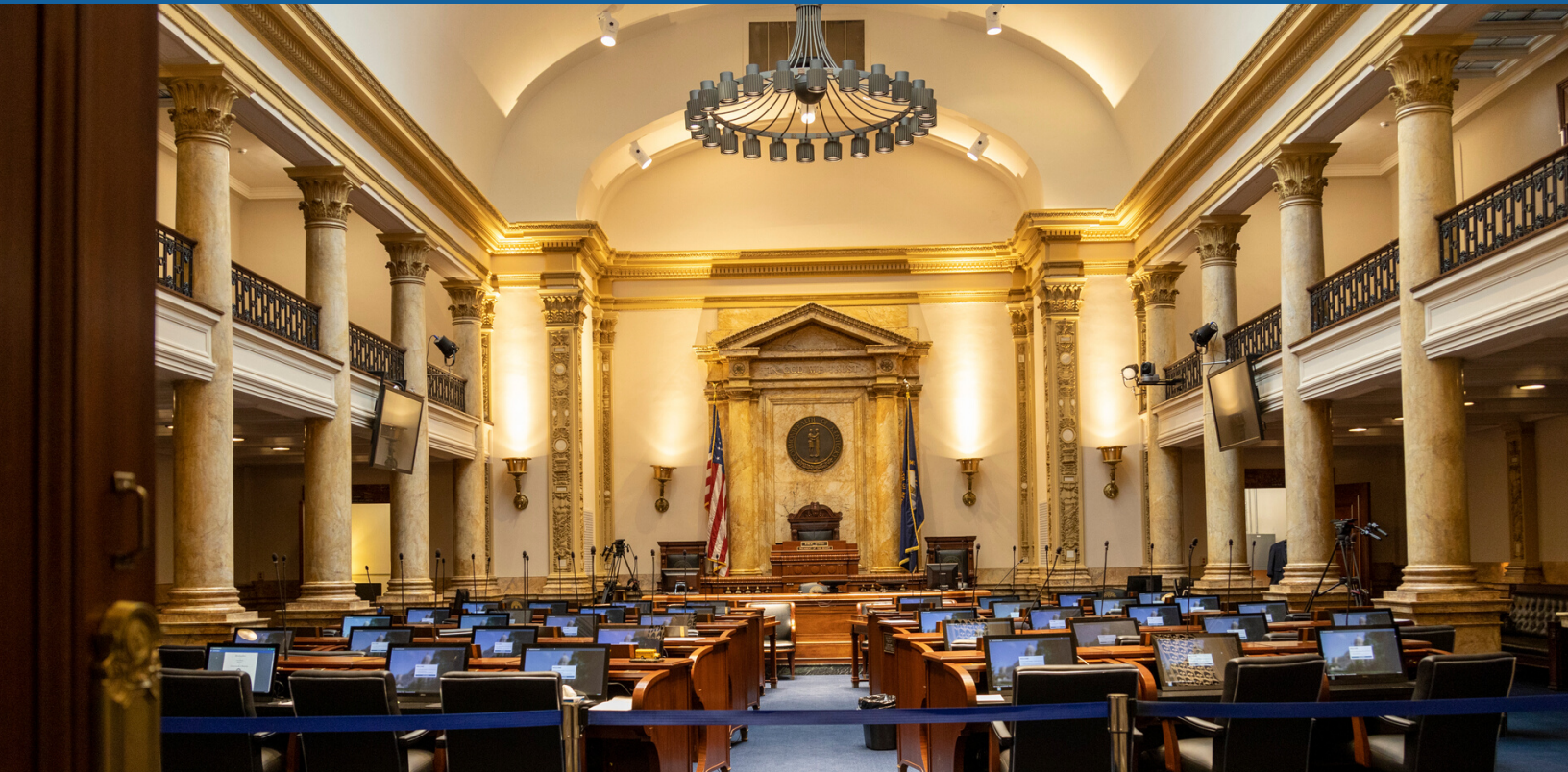


# FEDERAL FUNDING

## CONSTRAINTS ON TRIBAL OPPORTUNITIES IN CARBON DIOXIDE REMOVAL

BY MARK FOGARTY



### Contents:

1. Constraints on Tribal Opportunities
2. Sifting for gold in the IRA



Tribes wondering how to tap federal funding for carbon dioxide removal based on the deluge of recent climate change legislation--The Inflation Reduction Act (IRA), the Bipartisan Infrastructure Law (BIL), and the CHIPS and Science Act (CHIPS), for example—may still be puzzled months after passage of these multi-billion-dollar measures.

Clean energy and carbon removal analysts note that the IRA clearly favors engineered solutions like Direct Air Capture (DAC). Some funds will still be available for “natural” solutions that interest many tribes, such as afforestation and reforestation, soil sequestration and ocean-based CDR. But a flood of funding into engineered solutions—from both federal coffers and private-sector investors— is drawing concerns about risk of “picking winners” too soon.

A report from RMI, the energy and climate thinktank, raises caution flags. “Although diverse natural and engineered CDR solutions are in development, interest in direct air carbon capture and storage (DACCS) is accelerating due to potential, but not yet fully proven, advantages over nature-based solutions in terms of permanence, water and land use requirements, and ease of measurement and verification,” note the authors of RMI’s “Direct Air Capture and the Energy Transition: Putting Potential Opportunity Costs in Perspective.”

“This increased attention,” the RMI authors note, “raises legitimate concerns about the potential unintended consequences and opportunity costs of DACCS relative to the speed of the underlying clean energy transition, particularly when we are already underinvesting in lower-cost, proven mitigation solutions.”

The RMI report warns against constructing an “either/or proposition” between innovative climate tech like DAC and natural solutions. The authors wind up their executive summary with a call to action: “We need to continue accelerating the adoption of proven, low-cost mitigation solutions while investing in removal solutions that might backstop potential carbon budget overshoot and other long-term reductions in atmospheric greenhouse gas concentrations.”

Wil Burns, visiting professor of environmental policy and culture at Northwestern University, notes that the Administration’s heavy emphasis on high-tech DAC and sequestration reflects a reliance on “a narrow subset of carbon experts.” For all its merits, betting too heavily on DAC risks missing important opportunities elsewhere, he said. “I think it picks winners and losers way too quickly.”



Others, like Ben Rubin, executive director of the Carbon Business Council, were more sanguine about the possibilities for Tribes, seeing multiple forms of Tribal opportunity in the IRA. Tribes may even choose to get involved in the Direct Air Capture hydrogen hubs envisioned by the Administration, he said.

Jason Grillo, director of partnerships and operations at Air Miners, agreed. He said while DAC has gotten a lot of attention, Tribes can also pursue biochar, soil sequestration, and ocean-based methods, among others.

Burns doesn't disagree. "There is money for other things," in the legislation. But he said it was "relatively modest in comparison," noting that "there's no real support for ocean-based approaches."

As far as tribal participation goes, Burns said an important aspect will be "insuring tribal input into the process."

Policy can be reshaped, he noted, "but I do worry about that path dependency (on DAC). It's a very slow process to build these things and it takes a long time to assess whether we're getting what we want."

Finding IRA money for other types of carbon removal takes patience. The Senate Committee on Indian Affairs did a deep dive into the \$720 million allocated for Tribes and other parts of the bill that mention Tribes. The Committee found 30 sections of the bill (list appended at end), commenting "The IRA also provides access to billions more through competitive grants, loans, loan guarantees and contracts for which Tribes and Native communities are eligible."

Among those provisions, only a few even mention carbon.

Section 13801, for instance, "Enables tax-exempt entities—defined to include Tribal governments and Alaska Native Corporations—to monetize certain tax credits for alternative re-fueling properties, renewable electricity production, carbon oxide sequestration, zero-emission nuclear power production, clean hydrogen production, qualified commercial vehicles, advanced manufacturing production, clean electricity production, clean fuel production, energy activities under section 48 of the tax code, qualifying advanced energy projects, and clean electricity investments."



Section 23002 provides \$50,000,000, with no matching funds requirement, “for competitive grants for states and other eligible entities to make payments to private landowners, including Indian Tribes, to implement carbon reduction practices.”

Section 60112 funds “\$250,000,000 in grants and technical assistance to businesses, Indian Tribes, and other entities supporting such businesses, to manufacture construction materials and products for developing and verifying environmental product declarations, and for carrying out other activities that assist in measuring, reporting, and steadily reducing the quantity of embodied carbon of construction materials and products.”

Section 60506 provides \$2 billion for “reimbursing or providing incentives to Indian Tribes and other eligible recipients for the use of low-embodied carbon construction materials and products for projects on a Federal-aid highway, Tribal transportation facility, federal lands transportation facility, or federal lands access transportation facility.”

However, Burns and other experts still see room at the CDR table for Tribes.

And Tribes can participate in big DAC ventures despite the big cost. In British Columbia, the Upper Nicola Indian Band is an equity partner in a \$1.3 billion project to be built on Upper Nicola reserve lands, Burns said. As announced, that facility will use DAC to capture carbon from the air, then combine it with renewable hydrogen to make low-carbon fuel.

Since the facility will be built on its reserve, the Upper Nicola Indian Band sees potential for members to benefit from the thousands of construction jobs and several hundred permanent jobs the project is projected to create.

The tribe is a 10 percent partner in a venture, which is backed by several partners including \$2 million from the provincial government.

Chief Harvey McLeod noted some initial skepticism among members but said two big factors that enabling the project were the abundant land and hydropower available in Upper Nicola territory.

The project will use partner Carbon Engineering’s s Direct Air Capture and AIR TO FUELS™ technologies to capture carbon from the air and manufacture fuel.



According to the venture partners, who also include Huron Clean Energy and Oxy Low Carbon Ventures, the plant will combine air-captured carbon with hydrogen to create fuel that has 90 percent fewer emissions than traditional hydrocarbons.

It will be built on 100 acres of tribal land near Merritt, BC, and tribal participation will be in a land and business participation venture with Huron Clean Energy.

An engineering and design study was underway, funded by \$2 million from British Columbia, at the time the deal was announced in October 2021. Construction was expected to start in 2023 and operations to begin in 2026.

Goals are to produce 100 million tons of fuel per year as well as 25 million tons of green hydrogen.

Burns noted that not all Tribes and First Nations have the resources that enabled this project at Upper Nicola. “I don’t know how many opportunities of that type there will be” for others in Indian Country. However, many Tribes can engage in nature-based solutions, he said.

Other tribes are also pursuing ambitious carbon-related projects using engineered solutions. The Tulalip Tribes of Washington state one example. The Tulalip are now testing a new process at an existing biogas digester to generate hydrogen fuel and potentially carbon credits via sequestration.

Qualco Energy, a partnership of the Tulalip Tribes, Northwest Chinook Recovery and the Werkhoven Dairy, will deploy Modern Electron’s novel technology to produce clean hydrogen. Using renewable biogas as the methane feedstock, Modern Electron’s technology delivers hydrogen and, potentially, high value carbon credits from verifiable carbon sequestration.

The biogas is collected from Qualco’s dairy anaerobic digester. By using the cow manure in a digester instead of applying it directly to farm fields, Qualco helps to prevent the manure from washing into streams and rivers during flood events. It also enables the dairy to use the nutrients in the manure more efficiently. And it extracts methane-rich biogas that would otherwise offgas from the manure, putting it to use in combustion that greatly reduces its global warming potential. The biogas generates electricity purchased by the Snohomish County Public Utility District Number 1





The new process being piloted at Qualco is designed to further reduce greenhouse gas emissions.

Dr. Amit Goyal, Director of Technology at Modern Electron, said, “Our process uses renewable biogas to produce hydrogen and sequesters solid carbon at the same time. This new technique yields net negative emissions with significant environmental benefits, without the high cost of CO2 capture. We can also directly weigh the solid carbon we pull out from the biogas, and every kilogram of solid carbon we put into the ground directly translates to verifiable emissions captured and avoided.”

Some Tribes are using carbon revenues from offsets—usually generated by forest carbon projects—to buy back lands that seized from them in the past. The Yurok Tribe of California is using California’s carbon offset program to develop credits it can sell to buy back its own land. Since Tribal land can often be used in nature-based carbon projects, other Tribes are eyeing similar strategies.

## SIFTING FOR GOLD IN THE IRA

Tribes will decide for themselves how and whether they wish to pursue funding opportunities afforded by recent climate change laws. But finding the right funding source for a Tribe’s priorities will take some patience.

As an example, here is the list of the 30 sections of the IRA that single out tribes specifically or include them as eligible, along with other governments:

### SECTION-BY-SECTION OVERVIEW: IRA PROVISIONS FOR NATIVE COMMUNITIES TITLE I – COMMITTEE ON FINANCE

Sec. 13103. Increase in Energy Credit for Solar and Wind Facilities Placed in Service in Connection with Low-Income Communities.

- Amends Section 48 of the Internal Revenue Code of 1986 to increase credits for solar and wind facilities generating electricity in low-income communities, on Indian land, or as part of a low-income economic benefit project or a low-income residential building project (including programs administered by Tribally designated housing entities).



Sec. 13303. Energy Efficient Commercial Buildings Deduction.

- Amends Section 179D of the Internal Revenue Code of 1986 to provide increased deductions for energy efficient commercial buildings, and to permit tax-exempt owners of such facilities to allocate their tax deduction to the person designing the property. Tax-exempt entities defined to include Tribal governments and Alaska Native Corporations.

Sec. 13401. Clean Vehicle Credit.

- Amends Section 30D(b) of the Internal Revenue Code of 1986 to allow taxpayers to elect to transfer their “new clean vehicle” tax credit to car dealers registered with the Secretary of Treasury. Definition of “Dealer” includes a person licensed by a Tribal government or Alaska Native Corporation to engage in the sale of vehicles.

Sec. 13702. Clean Electricity Investment Credit.

- Amends Section 48C of the Internal Revenue Code of 1986 to create a clean electricity investment credit for a taxable year in an amount equal to the applicable percentage of the qualified investment for that year.

Where the Secretary of Treasury makes an allocation of environmental justice capacity limitation, the credit will be increased: 10 percentage points for facilities located on Indian lands; and 20 percentage points for facilities that are part of a program administered by a Tribally designated housing entity, where the financial benefits of the electricity produced by the building are allocated equitably among the occupants of the building’s dwelling units.

Sec. 13801. Elective Payment for Energy Property and Electricity Produced from Certain Renewable Resources, Etc.

- Enables tax-exempt entities—defined to include Tribal governments and Alaska Native Corporations—to monetize certain tax credits for alternative re-fueling properties, renewable electricity production, carbon oxide sequestration, zero-emission nuclear power production, clean hydrogen production, qualified commercial vehicles, advanced manufacturing production, clean electricity production, clean fuel production, energy activities under section 48 of the tax code, qualifying advanced energy projects, and clean electricity investments; and establishes special rules.



## TITLE II – COMMITTEE ON AGRICULTURE, NUTRITION, AND FORESTRY

### Sec. 23001. National Forest System Restoration and Fuels Reduction Projects.

Provides the following National Forest System funding to the Secretary of Agriculture, to remain available until September 30, 2031, with secretarial discretion to waive existing program cost-share requirements –

- \$2,150,000,000 for hazardous fuels reduction, vegetation management, more efficient and effective environmental reviews, and development and implementation of activities and tactics for the protection of old-growth forests, provided that funds must be used for activities on National Forest System lands (not including non-NFS Tribal lands), with potential 638 contracting opportunities for Tribes in connection with certain funds.

### Sec. 23002. Competitive Grants for Non-Federal Forest Landowners.

Provides the following funding, to remain available until September 30, 2031, subject to waivable minimum 20 percent cost-share requirement for partnership agreements –

- \$150,000,000, with no matching funds requirement, for competitive grants to provide a cost share for climate mitigation and forest resilience projects for underserved forest landowners, including Indian Tribes;
- \$150,000,000, with no matching funds requirement, for competitive grants to support underserved forest landowners, including Indian Tribes, in emerging private markets for climate mitigation or forest resilience;
- \$100,000,000, with no matching funds requirement, for competitive grants to support underserved forest lands owners, including Indian Tribes, who own less than 2,500 acres, in emerging private markets for climate mitigation or forest resilience; and
- \$50,000,000, with no matching funds requirement, for competitive grants for states and other eligible entities to make payments to private landowners, including Indian Tribes, to implement carbon reduction practices.
- \$100,000,000, subject to a 50% non-federal match requirement and \$5 million per grant limit, for competitive wood innovation program grants, including for construction of new facilities advancing the purposes of the program, and for hauling of material removed to reduce hazardous fuels to locations where that material can be utilized. o Tribal governments are eligible entities under the wood innovation grant program.

### Sec. 23003. State and Private Forestry Conservation Programs.

Provides the following funding, to remain available until September 30, 2031, with secretarial discretion to waive cost-share requirements –

- \$1,500,000,000 for competitive grants through the Urban and Community Forestry Assistance program (16 U.S.C. §2105(c)) to Indian Tribes and other entities for tree planting and related activities.





#### TITLE IV – COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

Sec. 40001. Investing in Coastal Communities and Climate Resilience.

Provides the following funding, to remain available until September 30, 2026 –

- \$2,600,000,000 to the National Oceanic and Atmospheric Administration (NOAA) for funding to Tribal governments and other entities through direct expenditure, contracts, grants, cooperative agreements, and technical assistance for conservation, restoration, and protection of coastal and marine habitats and resources, including fisheries, to prepare for climate related events and conditions.

#### TITLE V – COMMITTEE ON ENERGY AND NATURAL RESOURCES

Sec. 50122. High-Efficiency Electric Home Rebate Program.

Provides the following funding, to remain available until September 30, 2031 –

- \$225,000,000 for grants to Indian Tribes to develop and implement high-efficiency electric home rebate programs. Up to 20 percent of the grant may be used for planning, administrative costs, or technical assistance. The manner of distributing the funds to Indian Tribes will be determined by the Secretary of Energy. Grants under this section may not be combined with other federal grants or rebates, including a HOMES rebate.

Sec. 50145. Tribal Energy Loan Guarantee Program.

Provides the following funding, to remain available through September 30, 2028 –

- \$75,000,000 for the Department of Energy’s Tribal Energy Loan Guarantee Program, including for direct loans to eligible Tribal entities; and
- \$20,000,000,000 for loan guarantees under the program (a ten-fold increase).

Sec. 50152. Grants to Facilitate the Siting of Interstate Electricity Transmission Lines.

Provides the following funding to the Secretary of Energy, to remain available until September 30, 2029 –

- \$760,000,000 for, among other things, grants to Tribal governmental entities for economic development activities for communities that may be affected by the construction and operation of a covered transmission project.

Sec. 50233. Drought Mitigation in the Reclamation States.

Provides the following funding to the Secretary of the Interior, to remain available until September 30, 2026 –

- \$4,000,000,000 for grants to, or contracts or financial assistance agreements with, public entities and Indian Tribes for drought mitigation activities in Reclamation states for voluntary reduction of diversion or consumptive water use, voluntary conservation projects, and ecosystem and habitat restoration projects. Priority will be given to the Colorado River Basin and other basins experiencing comparable levels of long-term drought.



## TITLE VI – COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

### Sec. 60101. Clean Heavy-Duty Vehicles.

Provides the following funding under the Clean Air Act, to remain available until September 30, 2031

–

- \$600,000,000 for grants and rebates to eligible recipients, and contracts with eligible contractors for providing rebates, of up to 100 percent of costs for replacing eligible vehicles (Class 6 or 7 heavy-duty) with zero-emission vehicles, purchasing, installing, operating, and maintaining infrastructure to charge, fuel, or maintain zero-emission vehicles; related workforce development and training; and related planning and technical activities. An additional \$400,000,000 for Indian Tribes and other eligible recipients and contractors serving one or more communities located in an air quality area designated as nonattainment for any air pollutant.

### Sec. 60103. Greenhouse Gas Reduction Fund.

Provides the following funding under the Clean Air Act, to remain available until September 30, 2024

–

- \$7,000,000,000 for competitive grants to Tribal governments and other eligible recipients to issue grants, loans, and other financial and technical assistance to enable low-income and disadvantaged communities to deploy or benefit from zero-emission technologies.

### Sec. 60106. Funding to Address Air Pollution at Schools.

Provides the following funding to the Environmental Protection Agency (EPA), to remain available until September 30, 2031 –

- \$37,500,000 for grants to Indian Tribes and other recipients eligible under section 103 of the Clean Air Act, and other activities to monitor and reduce greenhouse gases and other pollutants at schools in low-income and disadvantaged communities.
- \$12,500,000 for grants to Indian Tribes and other recipients eligible under section 103 of the Clean Air Act, to provide technical assistance to schools in low-income and disadvantaged communities.

### Sec. 60107. Low Emissions Electricity Program.

Provides the following funding under the Clean Air Act, to remain available until September 30, 2031

–

- \$17,000,000 for outreach and technical assistance to, and partnerships with, Tribal and other governments for reductions in greenhouse gas emissions that result from domestic electricity generation and use.

### Sec. 60110. Funding for Enforcement Technology and Public Information.

Provides the following funding to the Environmental Protection Agency (EPA), to remain available until September 30, 2031 –

- \$3,000,000 for grants to Indian Tribes, states, and air pollution control agencies to update systems to ensure communication with the Integrated Compliance Information System of the EPA.



Sec. 60112. Environmental Product Declaration Assistance.

Provides the following funding to the Environmental Protection Agency (EPA), to remain available until September 30, 2031 –

- \$250,000,000 for grants and technical assistance to businesses, Indian Tribes, and other entities supporting such businesses, to manufacture construction materials and products for developing and verifying environmental product declarations, and for carrying out other activities that assist in measuring, reporting, and steadily reducing the quantity of embodied carbon of construction materials and products.

Sec. 60113. Methane Emissions and Waste Reduction Incentive Program for Petroleum and Natural Gas Systems.

Provides the following funding to the Environmental Protection Agency (EPA), to remain available until September 30, 2028 –

- \$850,000,000 for grants, rebates, contracts, loans and other EPA activities, including for Indian Tribes and other recipients eligible under section 103 of the Clean Air Act, to conduct methane emissions monitoring.
- An additional \$700,000,000 for performing these activities at marginal conventional wells.

Sec. 60114. Greenhouse Gas Air Pollution Plans and Implementation Grants.

Provides the following funding for grants to eligible entities—including states, municipalities, air pollution control agencies, Indian Tribes, and groups of such entities—

- \$250,000,000, to remain available until September 30, 2031, to one at least one eligible entity in each state for the costs of developing a plan to reduce greenhouse gas air pollution.
- \$4,750,000,000, to remain available until September 30, 2026, for eligible entities to implement such plans.

Sec. 60201. Environmental and Climate Justice Block Grants.

Provides the following funding under the Clean Air Act, to remain available until September 30, 2026 –

- \$2,800,000,000 for 3-year grants to eligible entities—including partnerships between Indian Tribes and community-based non-profits—for community-led air and other pollution monitoring programs, prevention, and remediation; investments in low and zero-emission and resilient technologies, and related infrastructure and workforce development; mitigating climate health risks from urban heat islands, extreme heat, wood heater emissions, and wildfire events; climate resiliency and adaptation; reduction of indoor toxins and indoor air pollution; and facilitating engagement of disadvantaged communities in state and federal public processes. \$200,000,000 for technical assistance to eligible entities awarded such grants.



Sec. 60505. Environmental Review Implementation Funds.

Provides the following funding to the Federal Highway Administration, to remain available until September 30, 2026, subject to a cost-sharing requirement of at least 20 percent –

- \$100,000,000 for funding to Indian Tribes and other eligible entities to build environmental review capacity, facilitate environmental review for proposed projects, and for related administrative expenses. The non-federal cost-share portion may be covered by funds from federal, state, or local grants programs.

Sec. 60506. Low-Carbon Transportation Materials Grants.

Provides the following funding to the Federal Highway Administration, to remain available until September 30, 2026 –

- \$2,000,000,000 for reimbursing or providing incentives to Indian Tribes and other eligible recipients for the use of low-embodied carbon construction materials and products for projects on a Federal-aid highway, Tribal transportation facility, federal lands transportation facility, or federal lands access transportation facility.

TITLE VII – COMMITTEE ON HOMELAND SECURITY AND GOVERNMENTAL AFFAIRS

Sec. 70007. Federal Permitting Improvement Steering Council Environmental Review Improvement Fund Mandatory Funding.

Provides the following funding, to remain available until September 30, 2031 –

- \$350,000,000 to the Federal Permitting Improvement Steering Council to carry out their responsibilities, including outreach and consultation with Indian Tribes.

TITLE VIII – COMMITTEE ON INDIAN AFFAIRS

Sec. 80001. Tribal Climate Resilience.

Provides the following funding to the Bureau of Indian Affairs (BIA), to remain available until September 30, 2031, with no cost-sharing or matching requirements –

- \$220,000,000 for the Tribal Climate Resilience and Adaptation Program;
- \$10,000,000 for Bureau of Indian Affairs fish hatchery operations and maintenance programs; and
- \$5,000,000 for administrative costs.

Sec. 80002. Native Hawaiian Climate Resilience.

Provides the following funding to the Office of Native Hawaiian Relations (ONHR), to remain available until September 30, 2031, with no cost-sharing or matching requirements –

- \$23,500,000 for financial and technical assistance, direct expenditure, grants, contracts, and cooperative agreements for climate resilience and adaptation activities that serve the Native Hawaiian Community; and
- \$1,500,000 for administrative costs.



S.Sec. 80003. Tribal Electrification Program.

Provides the following funding to the Bureau of Indian Affairs (BIA), to remain available until September 30, 2031, with no cost-sharing or matching requirements –

- \$145,500,000 for the electrification of unelectrified Tribal homes, transitioning electrified homes to zero-emission energy systems, and associated necessary home repairs and retrofitting; and
- \$4,500,000 for administrative costs to carry out the program.

Sec. 80004. Emergency Drought Relief for Tribes.

Provides the following funding to the Bureau of Reclamation, to remain available until September 30, 2026, with no cost-sharing or matching requirements –

- \$12,500,000 for near-term drought relief actions to mitigate drought impacts for Indian Tribes impacted by the operation of a Bureau of Reclamation water project, including through direct financial assistance to address drinking water shortages and to mitigate the loss of Tribal trust resources.

SOURCE: Senate Committee on Indian Affairs

