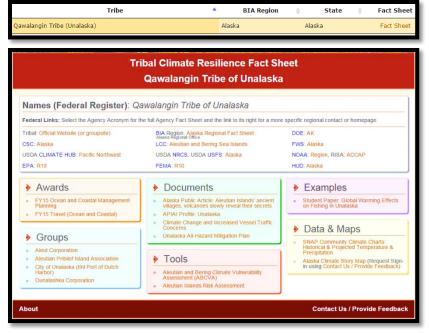
Tribal Climate Resilience Resource Guide

http://toolkit.climate.gov/tribal

USER MANUAL





Getting StartedBuilding Tribal Resilience

Using the Tribal Climate
Resilience Resource Guide

(TCR RG)

http://toolkit.climate.gov/tribal

Prepared for the

Whitehouse Council on Native American Affairs (WHCNAA)
Climate Subgroup



Prepared by the Bureau of Indian Affairs <u>Tribal Climate Resilience Program</u> (BIA TCRP)

April 2016

TCR RG Tips and Tricks Revealed!

- ➤ Which Agency Tribes & Climate Resources can help our Tribe or Alaska Native community contend with climate impacts and help plan and implement adaptation strategies?
- Which Regional Tribes & Climate Resources can help us learn about specific climate impacts, data, solutions, and area intertribal and academic partners that can help us?
- How can <u>Tribal</u>, <u>Tribal College</u>, and <u>Intertribal Fact Sheets</u> lead me to site-specific agency contacts, resources, <u>examples</u> and plans to draw from to address our climate concerns?
- Why are <u>Training</u>, <u>Planning</u> and <u>Funding</u> links organized into six strategies by *U.S. Climate Resilience Toolkit* <u>Tribal Nations Topic</u>, subtopics: <u>Assessment and Planning</u>, <u>Adaptation</u>, <u>Mitigation</u>, <u>Disaster Risk Reduction</u>, <u>Relocation</u>, and <u>Capacity Building</u>?
- Why focus on both <u>Youth</u> and <u>Guidance for Appropriate</u> <u>Incorporation</u> of <u>Traditional Knowledges (TKs / Traditional Ecological Knowledge – TEK)</u> in climate change initiatives?

http://www.data.gov/climate/tribal-nations



DATA TOPICS - IMPACT APPLICATIONS DEVELOPERS CONTACT

CLIMATE - TRIBAL NATIONS

Tribal Nations Maps

The Tribal Nations Map Gallery includes printable PDF wall-map versions (24×36) of the Indian and Ceded Lands Web Services found in the data tab.

The Map Gallery also includes interactive maps from federal partners, intertribal groups, and a tribal climate map showcase of example work products to inform climate resilience efforts of tribes, Alaska Natives, and other diverse communities nationwide.



Indian Lands in the United States



Indian Land Areas Judicially Established 1978 and American Indian Reservations



DOE Tribal Energy Programs

Great Lakes Indian Fish and Wildlife Commission Maps

TRIBAL NATIONS IN AGENCY-WIDE FEDERAL SYSTEMS LINKED TOGETHER THROUGH THE TCR RG



Get Started **Taking Action** Tools **Topics**

About | Contact | Funding Opportunities | FAQ | Search

Topics > Tribal Nations >



Tribal Nations

Key points:

• Climate change impacts are projected to be especially severe for many of the 567 federally recognized tribes in the United States that depend on traditional places, foods, and lifestyles.

http://toolkit.climate.gov/topics/tribal-nations



http://toolkit.climate.gov/tribal

Start at the TCR Resource Guide (Landing Page)

http://toolkit.climate.gov/tribal



From the Tribal **Climate Resilience Resource Guide** Landing Page, select one of the eight topics (circles) to explore resources. Choose Agencies, Regions, or Tribes to visit specific listings or choose a topical webpage: Youth, Funding, Training, Planning, or **Traditional** Knowledges (TKs) / **Traditional Ecological** Knowledge (TEK).



Bureau of Indian Affairs



TRIBAL CLIMATE RESILIENCE PROGRAM

Go to http://www.bia.gov/ and select Category: Climate Change / TCR

Spring/Summer 2016 K-12 BIA/BIE Tribal Student Climate Change Photo Contest and 2015 Summer and Fall Contest Winners









- Join! the Tribal Climate Change Photo Contest (PDF flyer)

 DUE April 30th (2016 Spring Contest) or August 26th (2016 Summer Contest)

 Using a classroom or cell phone camera, take a picture of things of value in your community that climate change might affect, include a climate caption, and submit the photo or questions by e-mail to: bia_climate_photo_contest@bia.gov or by teacher's class instructions. Categories: K-5, 6-8, & 9-12.
- 2015 Summer and Fall Tribal Student Photo Contest Award Winners (pdf)

- ▶ USDA Climate Hubs
- ▶ Climate Action Framework

CLIMATE MAPS

- ▶ Indian Lands
- Ceded Lands

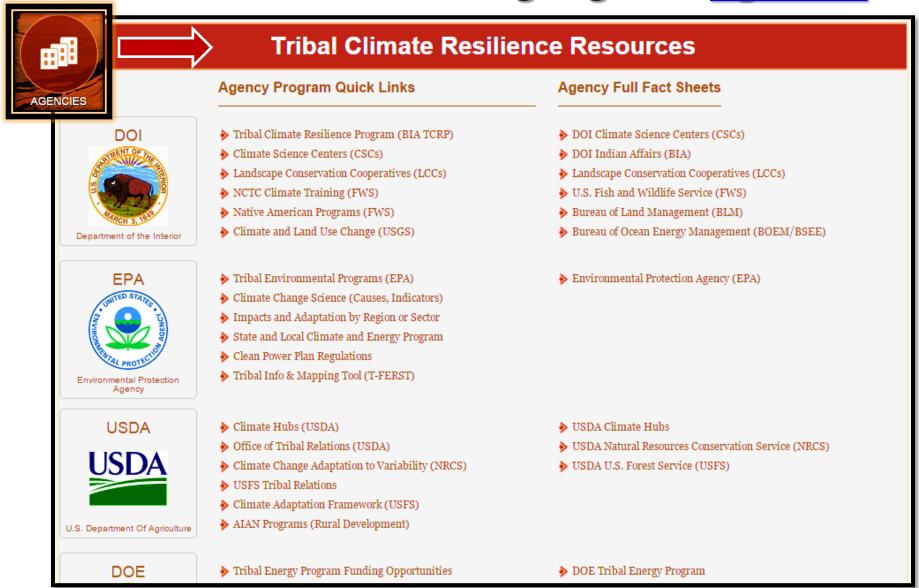
BIA TCR PROGRAM PRODUCTS

- ▶ News! Youth CC Gathering
- Download Program Brochure
- Tribal Climate Resilience
 Resource Guide

Access the Tribal Climate Resilience Resource Guide here

In addition to the direct link, agencies participating in the WHCNAA Climate Subgroup may also provide a link to the TCR RG from their *Tribes* and / or *Climate* webpage.

TCR Resource Guide Listing Pages -1. Agencies



Choose the <u>Agencies Icon</u> on the TCR RG Landing page to get to <u>Quick Links</u> that provide a few primary <u>Tribes & Climate</u> items, and its <u>Full Fact Sheet</u> for more details.

Agency Fact Sheet: Example - NOAA

Tribal Climate Resilience Resources - AGENCY CLIMATE RESOURCES National Oceanic and Atmospheric Administration (NOAA) FACT SHEET

Orientation

NOAA works with a variety of Tribal Nations and Organizations on a diverse array of marine and coastal concerns. Regional Centers also provide climate trends and weather forecasts nationwide.

Services

- AASC Climate Service Catalog (Partner)
- Climate At National Weather Service (NWS)
- National Integrated Drought Information System (NIDIS)
- NOAA Climate.Gov Dashboard, News, Maps, Support
- NOAA Fisheries Tribal Consultation In Alaska
- NOAA Regional Climate Centers
- NOAA Regional Integrated Science And Assessment Programs (RISAS)
- Tribal Relations News And Links (Inter-Agency)

Products

- Alaska ACCAP Select Projects (OA, SNA, Coastal Change, More...)
- CA-NV Decision Support Tools (ArkStorm, Drought, Downscaling, Data Archive, GB Dashboard)
- Climate Assessment For The Southwest Phase III Report
- Climate Information (NCEI)
- El Niño & La Niña (ENSO)
- National Drought Overview (NCEI)
- Poster! 10 Signs Of A Warming World
- Socioeconomics And Climate Change In The Great Lakes Region
- Tribal Resource Guide To U.S. Dept. Of Commerce (Partner)
- Western Water Assessment Decision Support Tools (Climate Dashboard, CRAG, TreeFlow)

Funding

- 2016 NOAA Climate Program Office Funding
- NOAA And Other Grants (Federal-Wide Options)
- NOAA Coastal Funding Opportunities
- NOAA Sea Grant Programs (Zoom Out For Alaska)
- NOAA Species Recovery Grants To Tribes
- TCCG Possible NOAA Funding Opportunities

▶ Tools

- Climate Data Access (NCEI)
- CRT Partner On: NSIDC Atlas Of The Cryosphere
- CRT Tool Partner For: Atlas Of Community-Based Monitoring And Traditional Knowledge In A Changing Arctic
- CRT Tool Partner For: Climate-Smart Conservation: Putting Adaptation Principles Into Practice
- CRT Tool Partner For: G-WOW Guiding For Tomorrow: Changing Climate, Changing Culture
- CRT Tool Partner For: Ocean Acidification Curriculum Collection
- CRT Tool Partner For: U.S. Drought Portal
- Lead On: Synthesis Of Arctic Research (SOAR)
- Partner On: Community Collaborative Rain, Hail And Snow Network (CoCoRaHS)
- Partner On: Rutgers Global Snow Lab
- U.S. Climate At A Glance (NCEI)
- U.S. Climate Resilience Toolkit (Tribal Nations Topic)

Training

- Inter-Tribal Youth Climate Leadership Congress
- NCAR GLOBE Education Programs (Partner)
- Next Generation Climate Curriculum
- NOAA West Tribal Portal Staff Training Links
- NWS Climate Services Seminar Series
- SCIPP SPL Youtube Video Training Archive
- Subscribe! NOAA Climate Stewards Webinars Alerts
- Teaching Climate

Examples

- CRT Partner On: Alaskan Tribes Join Together To Monitor Harmful Algal Blooms
- CRT Partner On: Assessing The Timing And Extent Of Coastal Change In Western Alaska
- CRT Partner On: Jamestown S'Klallam Tribe Plans For Change On The Olympic Peninsula
- CRT Partner On: Looking To The Future On Alaska's North Slope
- CRT Partner On: Preparing To Respond To Oil Spills In The Arctic
- CRT Partner On: Suqamish, Ocean Acidification Curriculum Collection
- SOAR Lead On: Alaska Fisheries And Communities At Risk From Ocean Acidification

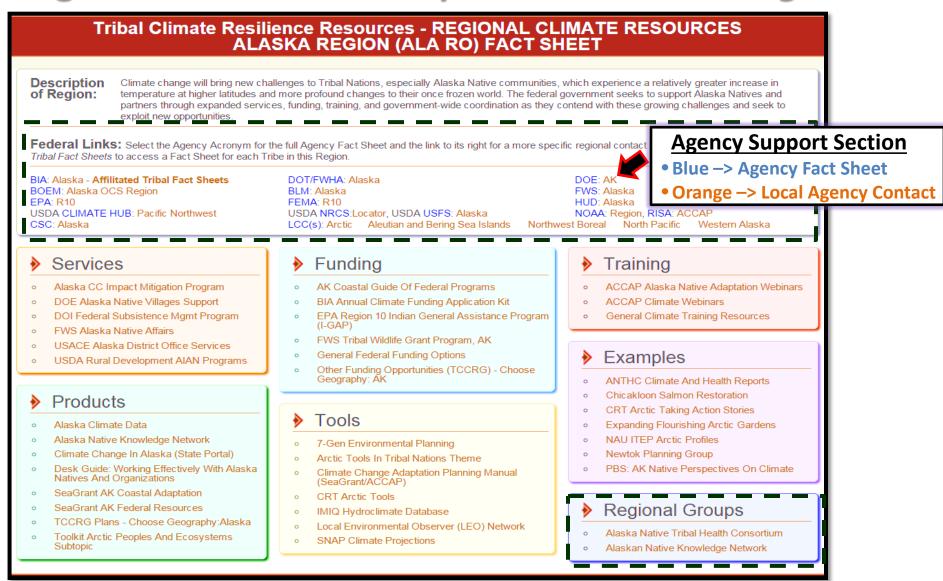
Each Agency Fact Sheet lists Resources and Tools & Cases from CRT Tribal Nations that the Agency developed with Tribes, as well as Funding, Training, Services, and **Products that** support either TRIBES and/or CLIMATE in a consistent layout in one unified source.

TCR Resource Guide Listing Pages – 2. Regions



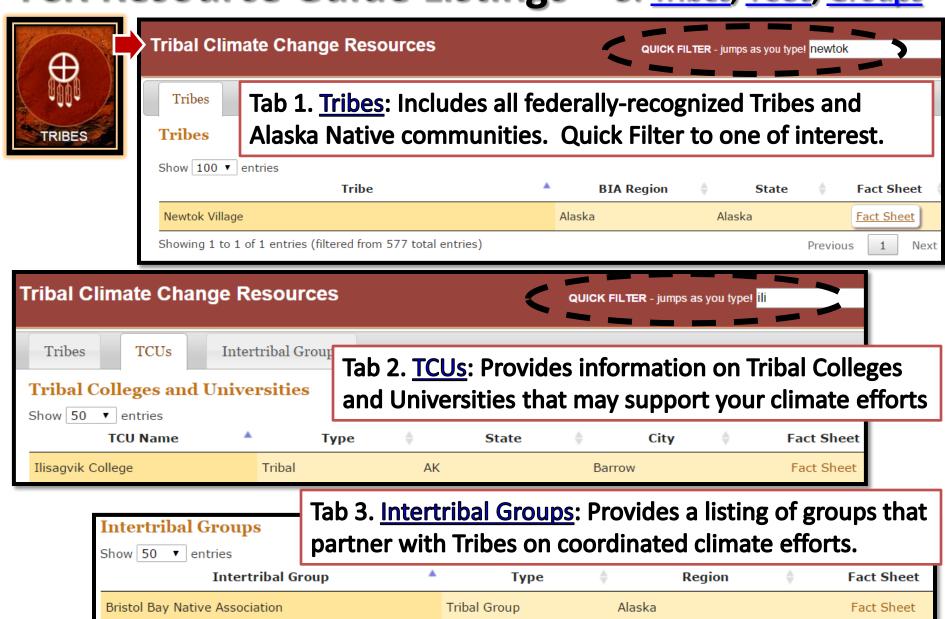
To provide more sitespecific information, resources are also organized by BIA region, since each Tribe in the U.S. is associated with a BIA service area. Select the region for your tribe to access federal-wide support for that area of interest.

Region Fact Sheet: Example - BIA Alaska Region



Region Fact Sheet resources are organized similarly to Agency Fact Sheets, but they also link to federal-wide agency regional support and area climate support groups.

TCR Resource Guide Listings – 3. Tribes, TCUs, Groups



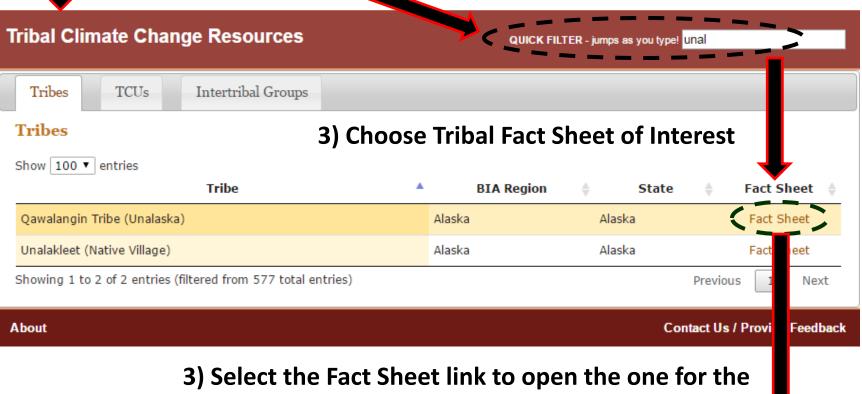
Choose a Tab, Enter a few letters in the Name in the Quick Filter, & Select a Fact Sheet.



Find Your Tribal Fact Sheet

1) Choose TRIBES icon from 2) Juli the landing page letter

2) *Jump to Tribe* by entering 3 to 4 distinct letters from its Name in the Quick Filter



3) Select the Fact Sheet link to open the one for the corresponding Tribe, TCU, or Group shown

Tribal Climate Resilience Fact Sheet

Qawalangin Tribe of Unalaska



Tribal Fact Sheet Example

Agency Support Section

- Blue -> Agency Fact Sheet
- Orange -> Local Agency Contact

Tribal Climate Resilience Fact Sheet Qawalangin Tribe of Unalaska

Names (Federal Register): Qawalangin Tribe of Unalaska

Federal Links: Select the Agency Acronym for the full Agency Fact Sheet and the link to its right for a more specific

Tribal: Official Website (or groupsite)

CSC: Alaska

USDA CLIMATE HUB: Pacific Northwest

EPA: R10

BIA Region: Alaska Regional Fact Sheet

LCC: Aleutian and Bering Sea Islands

USDA NRCS, USDA USFS; Alaska

FEMA: R10

DOE: AK

FWS: Alaska

NOAA: Region, RISA: ACCAP

gional contact or homepage.

HUD: Alaska

Awards

- FY15 Ocean and Coastal Management Planning
- FY15 Travel (Ocean and Coastal)

Find Regional Groups

- Aleut Corporation Partners!
- Aleutian Pribilof Island Association
- City of Unalaska (Itnl Port of Dutch Harbor)
- Ounalashka Corporation

Documents Share Results! Examples

- Alaska Public Article: Aleutian Islands' ancient villages, volcanoes slowly reveal their secrets
- APIAI Profile: Unalaska
- Climate Change and Increased Vessel Traffic Concerns
- Unalaska All-Hazard Mitigation Plan

Tools

- Aleutian and Bering Climate Vulnerability Assessment (ABCVA)
- Aleutian Islands Risk Assessment

Student Paper: Global Warming Effects on Fishing in Unalaska

Data & Maps

- SNAP Community Climate Charts: Historical & Projected Temperature & Precipitation
- Alaska Climate Story Map (Request Signin using Contact Us / Provide Feedback)

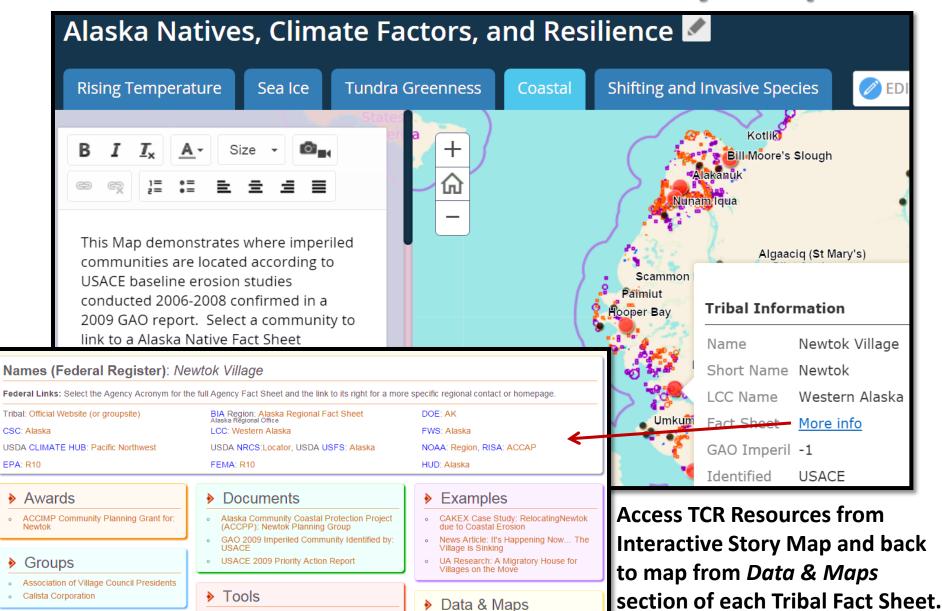
Locate Climate Data Links!

About

Ask for Help or Send New Links to Add!

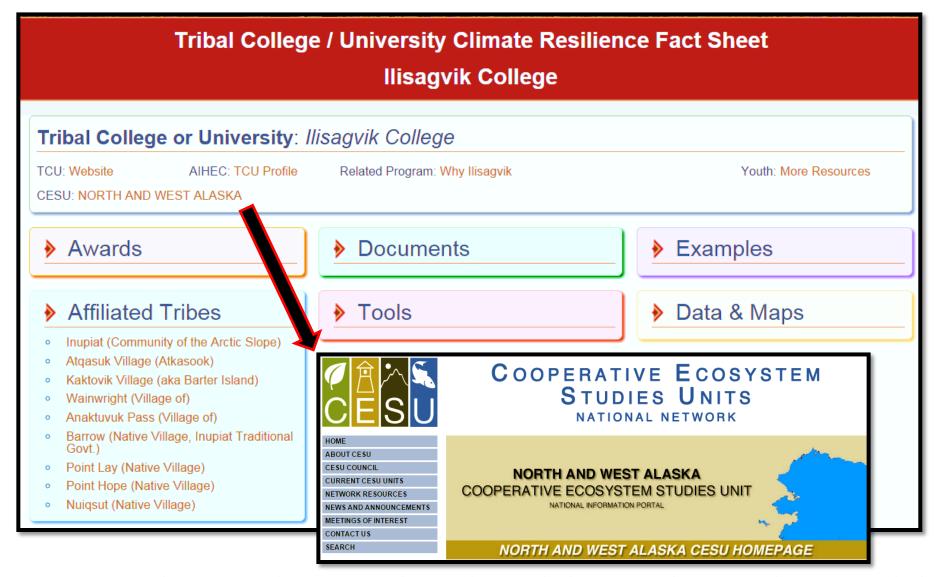
Contact Us / Provide Feedback

ArcOnline: Interactive Story Maps



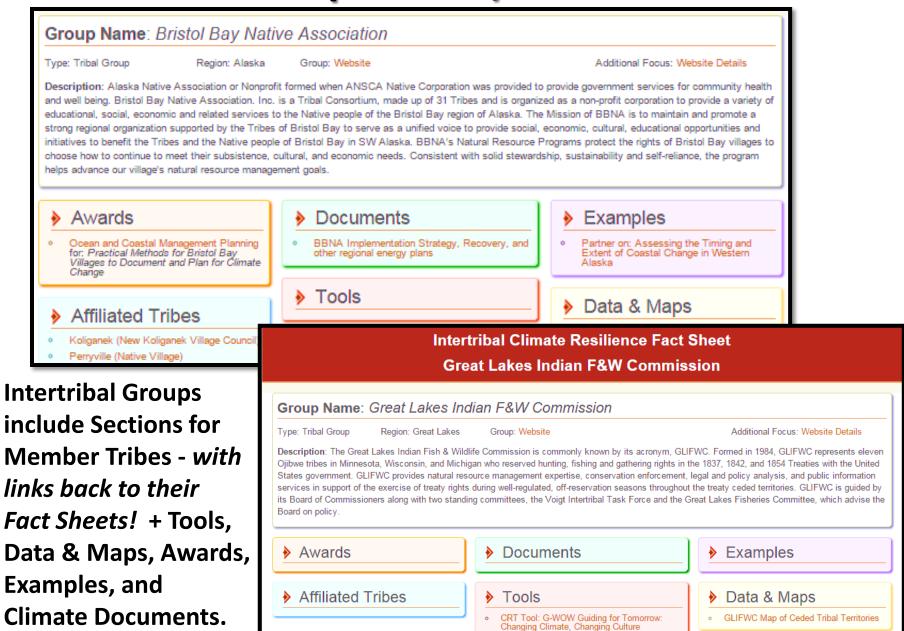
SNAP Community Climate Charts: Historical & Projected Temperature &

Tribal College: Example – Ilisagvik College, AK



TCU pages include its website and related climate links, <u>AIHEC</u> listing with contacts, link back to <u>Youth Resources</u>, Tribes, and one or more <u>CESUs</u> to join for discounts & support.

Intertribal Groups: Examples – BBNA & GLIFWC





Training Resources by CRT Strategy

Tribal Climate Resilience Resources
Training

Orientation

Climate Change Training Resources are listed by the six strategies/subtopics described in the U.S. Climate Resilience Toolkit, Tribal Nations Topic.

- Training for Adaptation
 Planning and Vulnerability
 Assessments
- NAU ITEP TCC Climate Change Adaptation Planning
- NAU ITEP TCC Upcoming and Archived Webinars
- NAU ITEP TCC Events Calendar (Exhaustive List of Nationwide Options)
- FWS NCTC Climate-Smart Conservation
- FWS NCTC Vulnerability
 Assessment (Regular Version)
- FWS NCTC Vulnerability
 Assessment (Online, Self-Paced Version)
- Training for Adaptation
 Strategy Prioritization and Implementation

- Training for Mitigation,
 Renewable Energy
 Development, and Energy
 Efficiency
 - DOE Tribal Energy Program Education and Training: Workshops
 - DOE Tribal Energy Program
 Education and Training: Webinars
- Training for Emergency
 Planning and Disaster Risk
 Reduction
 - FEMA Training
 - NDPTC Disaster Preparedness Training Options
- UN ISDR Climate and Disaster
 Risk Management Online Course
- Training for Relocation and Coastal Management

> Tribal Climate Curriculum

- Guidelines for Considering Traditional Knowledges in Climate Change Initiatives
- National Climate Assessment,
 C.12. Indigineous Peoples, Lands,
 and Resources
- Tribal Nations (and Arctic) in the U.S. Climate Resilience Toolkit tools, cases in six strategies
- G-wow Guiding for Tomorrow (Great Lakes)
- CYCLES Teaching Teachers Grades 5-12 in N. Minn
- POSOH Sustainability Cohort Project (community wide, crossinstitutional collaborations)
- Ocean Acidification Curriculum Collection (OACC - Suquamish lead)
- NCTC vulnerability assessment on demand, Climate Smart

Training Resources include links to **NAU ITEP TCC Climate Adaptation Training that** both BIA and EPA promote. **CSCs** and **LCCs** also sponsor **NCTC** climate courses. Other options are listed by strategy, such as **FEMA** training for **Disaster Risk**

Reduction.



Planning Resources by CRT Strategy

Planning Support

Orientation

Tribal Climate Change Planning Resources are listed by the six strategies/subtopics described in the U.S. Climate Resilience Toolkit, Tribal Nations Topic. See also the Funding Section and the Training Section and for specific courses and curriculum of interest. The PNW TCC Tribal Climate Change Resource Guide includes additional and expanding resources by topic; some sections are also highlighted below.

- Adaptation Planning and Vulnerability Assessments
 - PNW TCCG: Climate Planning Resources
 - PNW TCCG: Adaptation Plan Listings
 - ANTHC CCH Climate Change & Health Assessment Reports
 - ANTHC Seven Generations Planning
 - NAU ITEP TCC Climate
 Adaptation Planning Toolkit
 - NCCWSC/EcoAdapt Climate Registry for the Assessment of Vulnerability (CRAVe)
 - CRT Tribal Nations: Assessment and Planning

- Mitigation, Renewable
 Energy Development, and
 Energy Efficiency
 - DOE Tribal Energy Program Funding, Assistance, Projects, more...
 - IEED Tribal Energy && Mineral Development Toolbox
 - IEED Tribal and Environmental Information Clearinghouse
 - EPA Clean Power Plan
 - EPA Clean Energy Incentive Program (State Interest Due 9/6/16!)
 - CRT Tribal Nations: Mitigation
- Emergency Planning and
 Disaster Risk Reduction (DRR)
- FEMA and Tribal Nations: A Pocket Guide

- Relocation and Coastal Management
 - Federal Resources for Climate Resilience in Alaskan
 Communities
 - National Sea Grant Resilience Toolkit
 - CRT Tribal Nations: Relocation
- > Capacity Building
- CRT Tribal Nations: Capacity
 Building
- CDI Tribal Nations: Capacity Building Tools Listings
- PNW TCCG: Tribal Climate Groups

Contact Us / Provide Feedback

Planning Resources include links to Tribal Climate Adaptation Plans, Topical <u>Tribal Examples,</u> links to specific agency programs and support, and a focus on six strategies with references to **National Climate Assessment** recommendations and applicable tools. For specific needs, use the feedback form to request resource assistance, data, maps, or models.

Adaptation Strategy
Prioritization and
Implementation



Funding Options by CRT Strategy



Orientation

Tribal Climate Change Federal Funding resources are listed by the six strategies/subtopics described in the U.S. Climate Resilience Toolkit, Tribal Nations Topic. The PNW TCC Tribal Climate Change Resource Guide includes more exhaustive funding options.

- Funding for Adaptation
 Planning and Vulnerability
 Assessments
 - BIA Tribal Climate Resilience Program: Awards for Planning and Training
 - PNW TCCG: Funding Search
- Funding for Adaptation
 Strategy Prioritization and Implementation
- EPA Indian General Assistance Program (I-GAP)
- EPA Tribal 319 Grants for Non-Point Source Water Pollution
- EPA Tribal 106 Grants for Water Pollution Control
- EPA Tribal Air Grants

- Funding for Mitigation,
 Renewable Energy
 Development, and Energy
 Efficiency
 - DOE Tribal Energy Program Funding
 - IEED Tribal Energy Energy Development Capacity Grant Program
 - EPA Clean Energy Incentive Program (State Interest Due 9/6/16!)
- Funding for Emergency
 Planning and Disaster Risk
 Reduction (DRR)
 - FEMA and Tribal Nations: A
 Pocket Guide

- Funding for Relocation and Coastal Management
- Federal Resources for Climate Resilience in Alaskan
 Communities
- HUD Indian Community
 Development Block Grant
 Program
- Funding for Capacity Building
- Indian Loan Guarantee Program
- Youth Capacity Building Page

Contact Us / Provide Feedback

Funding Resources by Strategy provides an example of a few federal funding options for each strategy, but more specific programs can be found on each Agency Fact Sheet. Contact us about leveraging groups and networks.



Orientation

Traditional Knowledges / Traditional Ecological Knowledge Integration

Tribal Climate Resilience Resources
Traditional Knowledges / Traditional Ecological Knowledge

Guidelines for Considering Traditional Knowledges in Climate

Change Initiatives will help protect knowledge and holders of TKs

Indigenous traditional knowledges (TKs) have emerged in national and international arenas as rich information for indigenous and non-indigenous climate assessments, policies, and adaptation strategies. With this growing recognition, however, comes potential risks to indigenous peoples in sharing TKs in federal and other non-indigenous climate change initiatives. These resources assist Tribes, Agencies, and other Partners build respectful, complimentary efforts together.

Guidance

- Tribal Nations Summary and References
- Guidelines for TK, Primer, Ethics Essay in Toolkit
- NP-NH Climate Change Workshop II Report
- First Stewards 2012 Witness Report
- Rising Voices Reports and Outcomes
- AIAN Guide to Build Cultural Awareness

Examples

CMN SDI Model to Inform Climate Initiatives

> Research Papers

- CMN SDI Model
- Best of 2 Worlds: TEK in ESB Management
- CC and Indigenous Peoples in the U.S.
- Guarding Against Exploitation: TEK & CC
- Engagement that Honors TKs
- TCCG Publications
- IPCC Portal Publications Books

Videos

- Braids of Truth, Part Two: Climate Change
- ITEP: Adapting to Change

▶ Federal TEK Awareness

- ACCCNRS TK Guidelines and Primer - Summaries
- CC Through an Intersectional Lens
- USFS Exploring Role of TEK in CO Initiatives
- USFS Briding the Gaps that Divide
- US FWS Basic TEK Info
- NIH TEK and Its Value for EHS
- NIH TEK Workshop Day 2
- EPA Using TEK to Adapt to CC
- EPA TSC: TEK in Policy and Decision Making
- NOAA TEK and CC Impacts
- NPS Integrating TEK into NRM
- · Tribal Engagement in CSCs and

When working with Tribal Nations, federal and academic projects and partners are often enriched by the deeply integrated understanding of the relationships among all living things that indigenous people have honed since time immemorial. This may lead to breakthroughs in adaptation through keen natural observations, unique perceptions, and a focus on harmonious ways. Learn more with TKs/TEK links!

Youth Resources for Next Generation Progress

Tribal Climate Resilience Resources Youth and Climate

YOUTH

Orientation

Tribal Youth are increasingly impacted as their families and communities attempt to sustain tribal lifeways in the face of climate disruptions. Climate change curriculum, educational groups, internships, and programs may help Tribal Youth gain a sense of empowerment to address climate challenges.

- Tribal Youth, Education, and Climate Groups
- Bureau of Indian Affairs Tribal Climate Resilience Program
- Bureau of Indian Education
 Schools
- American Indian Higher
 Education Consortium (AIHEC)
- American Indian Association of Engineering and Science (AISES)
- National Indian Education Association (NIEA)

- Tribal Student Climate and STEM Career Funding
 - NASA Tribal College and University ELO Program Internships
 - CMN SDI Indigenous Planning Summer Institute
 - NAU ITEP Environmental
 Education Outreach Program
 - American Indian College Fund Internships, Fellowships, Scholarships, and Opportunities

- > Tribal Climate Curriculum
 - Guidelines for Considering Traditional Knowledges in Climate Change Initiatives
 - National Climate Assessment, C.12. Indigineous Peoples, Lands, and Resources
 - Tribal Nations (and Arctic) in the U.S. Climate Resilience Toolkit tools, cases in six strategies
- G-wow Guiding for Tomorrow (Great Lakes)

Youth Topics include Climate Groups to join, Student Funding, Climate Curriculum, Climate Programs, Examples, Research Tools, and College-Ready Support Tools.



Feedback Category *

Please enter the main type of feedback

Suggestion to Improve TCR RG Broken Link on TCR RG Other TCR RG Error Climate Change data Climate Change funding Climate Change resources Climate Change documents U.S. Climate Resilience Toolkit Other Climate Change issues

If you'd like a direct response, ple please include your Name) your fe

and either an email or phone

If you need a response to your fe

For *direct* assistance: Include your Name, **Email and/or Phone!**

Contact Us / Provide Feedback

Select the <u>Feedback Form</u> from the right-hand, bottom corner of the Landing Page or the footer on any page in the TCR RG for help, to suggest links, or to report issues.



Getting the Most out of the *Tribal*Climate Resilience Resource Guide

- ➤ Tribal Liaisons can visit a Region or Tribal Fact Sheet with a Tribe or Intertribal Group to discuss resources and option for considering climate
- ➤ A Tribe can visit each <u>Agency Fact Sheet</u> to gain better understanding of the full breadth of federal support
- ➤ College faculty and advisors can review the **Youth page** with students interested in **STEM fields** & climate change
- ➤ Academic and non-profit partners should carefully review the <u>Traditional Knowledges (TKs)</u> section to ensure respectful, well-integrate climate projects and policies that protect knowledge and knowledge-holders

THANK YOU FOR YOUR FEEDBACK

For Questions concerning the Tribal Climate Resilience Resource Guide, Support for Federal or Tribal Climate Coordination Initiatives, or Finding Federal-wide Tribes and Climate Resources or Mapping/Modeling support, contact BIA Tribal Climate Resilience Program (TCRP) IT/GIS Systems and Services:

Margaret T. Herzog, PE, PMP, PhD (303) 238-0419, margaret.herzog@bia.gov