FY17 CPO	Annual Opera	ting Plan													
DOC Strategic Plan	5-Year Research	NOAA Annual Guidance	NGSP Goal:	OAR Strategic	Perform		(NOTI		easure or Milestone Targets port Measure or Milestone Targets in the	PRIN	MARY RESPONSI	BILITY			PERFORMANCE MEASURE and MILESTONE
Objective (if applicable)	Plan Goal: Objective - Target	Memo Priority	Objective (if applicable)	Plan	(NOTE: Do not report Measure or N	Allestone Targets in the same row)	Toront	Actual	same row)		1		NOAA		DESCRIPTIONS
Please use the pull-down menu to select the objective	Please use the pull- down menu to select the objective	Please use the pull-down menu to select the objective	Please use the pull-down menu to select the objective	Please use the pull-down menu to select the objective	Measure (The monitoring of ongoing progress toward pre- established goals.)	Milestone (A distinct activity planned for completion on a scheduled date)	17 Q4	17 Q4	Why was the target missed? When will the target be completed? What is the risk of missing the target?	Unit within LO/SO	Point of Contact	Responsible SES	gion (if applicable)	CI Partner (if applicable)	
3.1 Advance understanding of environmental change	Climate: ESM - Develop seasonal outlooks	NWS: National Weather Service (NWS)	Climate_Scientific	Climate: Predictions	Annual number of Climate Program Office R&D products transitioned to a new stage (development, demonstration, or application)		22	22	This number is the result of the projects in the next tab, CPO R2A.	СРО	Neil Christerson	Wayne Higgins		NA	Transition research and development (R&D) capabilities to applications to reduce adverse effects of environmental events on people and property.
3.1 Advance understanding of environmental change	Climate: Improve understanding - Assess climate induced changes	Org Excellence: Alignment of R&D to support NOAA (OAR)	Climate_Scientific	Climate: Variability and change	Improve climate understanding, prediction, and information through the selection of at least 50 new grants annually		50	78		СРО	Neil Christerson	Wayne Higgins		Numerous	CPO's external grant programs, including funding opportunities address key information needs related to climate research, modeling, and the impacts of climate change on communities, infrastructure, and economies.
3.1 Advance understanding of environmental change	Climate: Improve understanding - Assess climate induced changes	Org Excellence: Alignment of R&D to support NOAA (OAR)	Climate_Scientific	Climate: Variability and change		Complete the CPO FY18 Federal Funding Opportunity (FFO) with at least 6 new competitions	6	8		СРО	Paul Hirschberg	Wayne Higgins		Numerous	CPO's external grant programs, including funding opportunities address key information needs related to climate research, modeling, and the impacts of climate change on communities, infrastructure, and economies.
3.1 Advance understanding of environmental change	Climate: Improved assessments - Sustain assessments of the impacts and risks of climate	Org Excellence: Alignment of R&D to support NOAA (OAR)	Climate_Assessme nts	Climate: Inform & Support	Number of assessments or integrated plans developed or implemented across NOAA programs to enhance NOAA climate services.		2	5		СРО	Daniel Barrie	Wayne Higgins		Cooperative Institute for Climate and Satellites - North Carolina (CICS-NC)	This performance measure will demonstrate the role of formal climate change assessments in decisions to address climate change impacts by completing or having major contributions to assessments that are considered by business, government, or the public that affected decisions related to improved climate resilience
3.1 Advance understanding of environmental change	Climate: Info/Tools - Improve communication	Org Excellence: Alignment of R&D to support NOAA (OAR)	Climate_Scientific	Climate: Inform & Support		Deliver the final draft of the interagency Climate Science Special Report				СРО	Dan Barrie	Wayne Higgins		Cooperative Institute for Climate and Satellites - North Carolina (CICS-NC)	This special report provides an update to the physical climate science presented in the Third National Climate Assessment (NCA3) released in 2014. The CSSR provides updated climate science findings and projections, and is an important input to the authors of the next quadrennial NCA (NCA4), expected in 2018.
3.1 Advance understanding of environmental change	Climate: Info/Tools - Improve communication	Org Excellence: Alignment of R&D to support NOAA (OAR)	Climate_Scientific	Climate: Inform & Support		Coordinate and contribute to the Initial draft of the fourth National Climate Assessment	x	x		СРО	Dan Barrie	Wayne Higgins		Cooperative Institute for Climate and Satellites - North Carolina (CICS-NC)	The National Climate Assessment summarizes the impacts of climate change on the United States, now and in the future. A team of hundreds of experts produce the report, which is extensively reviewed by the public and experts, including federal agencies and a panel of the National Academy of Sciences.
3.1 Advance understanding of environmental change	Climate: Record - Observing Systems	Infrastructure: Utilization and Readiness of fleet (OMAO)	Climate_Scientific	Climate: State of system		Public release of the initial TPOS-2020 Report				СРО	David Legler	Wayne Higgins		Joint Institute for Marine and Atmospheric Research (JIMAR)	The TPOS 2020 Project will evaluate, and where necessary change, all elements that contribute to the Tropical Pacific Observing System (TPOS) based on a modern understanding of tropical Pacific science. The project aims for enhanced effectiveness for all stakeholders, informed by the development and requirements of the operational prediction models that are primary users of TPOS data.
3.1. Advance understanding of environmental change	Climate: Obs - Integrate into short and long time scale models	Infrastructure: Utilization and Readiness of fleet (OMAO)	Climate_Scientific	Climate: State of system	Reduced error in Global Measurement of Sea Surface Temperature. (Degrees Celsius (PC))		0.50	Results delayed. See note.	A Report on the SST GPRA Performance Metric Input Lotal Issues and Proposed Solutions: While expecting improvement in the SST Performance Metric (PM) starting is early 2017. He computed Metric (PM) starting is early 2017, the computed of the Metric (PM) starting is early 2017, the computed of the Metric (PM) starting is early 2017, the computed of the Metric (PM) starting is early 2017, the ST and 2017, the ST and 2018, the ST and 201	СРО	David Legler	Wayne Higgins		Cooperative institute for Climate and Satellites—North Carolina (CICS-NC)	This measure is intended to document progress in accurately measuring the global sea surface temperature (SST) using in situ drifting buoys to verify that satellite SST data are accurate and representative. This reflects how improvements in ocean observations will decrease the uncertainty in global sea surface temperature measurements, which will offinately be any one in calculations of the progression of the control of th
3.1 Advance understanding of environmental change	Climate: Record - Observing Systems	Org Excellence: Alignment of R&D to support NOAA (OAR)	Climate_Scientific	Climate: State of system		Characterize the evolving state of the ocean/marine environment in the 2016 State of the Climate report	x	x		СРО	David Legler	Wayne Higgins		Numerous	Ocean, atmospheric, and ecosystem data and products supported by CPO and OAR are analyzed, assessed, and contributed to the annual State of the Climate Report.
3.1 Advance understanding of environmental change	Climate: Record - Observing Systems	Org Excellence: Alignment of R&D to support NOAA (OAR)	Climate_Scientific	Climate: State of system		Complete the Annual (2016) Arctic Report Card				СРО	Jeremy Mathis	Wayne Higgins		Cooperative Institute for Arctic Research (CIFAR) Joint Institute for the Study of the Atmosphere and Ocean (JISAO)	The Arctic Report Card (www.arctic.noaa.gov/reportcard/) considers a range of environmental observations throughout the Arctic, and is updated annually. As in previous years, the 2015 update to the Arctic Report Card highlights the changes that continue to occur in both the physical and biological components of the Arctic environmental system.
3.1 Advance understanding of environmental change	Climate: Improve understanding - Assess climate induced changes	Org Excellence: Alignment of R&D to support NOAA (OAR)	Climate_Scientific	Climate: Variability and change	Annual number of peer-reviewed publications related to climate understanding and prediction		400	1016		СРО	Neil Christerson	Wayne Higgins		Numerous	Note: This measure was revised 10.9.15 to include "peer reviewed" publications only, therefore the FY16 "actual" will likely be lower than FY15.

FY17 CPO	Annual Operat	ting Plan													
DOC Strategic Plan Objective	5-Year Research Plan Goal: Objective	NOAA Annual Guidance Memo Priority	NGSP Goal: Objective	OAR Strategic Plan	Perform (NOTE: Do not report Measure or f		(NOTE		leasure or Milestone Targets eport Measure or Milestone Targets in the same row)	PRIM	1ARY RESPONSI	BILITY			PERFORMANCE MEASURE and MILESTONE DESCRIPTIONS
(if applicable) Please use the pull-down menu to select the objective	- Target Please use the pull- down menu to select the objective	Please use the pull-down menu to select the objective	Please use the pull-down menu to select the objective	Please use the pull-down menu to select the objective	Measure (The monitoring of ongoing progress toward pre- established goals.)	Milestone (A distinct activity planned for completion on a scheduled date)	Target 17 Q4	Actual 17 Q4	Why was the target missed? When will the target be completed? What is the risk of missing the target?	Unit within LO/SO	Point of Contact	Responsible SES	NOAA gion (if applicable)	CI Partner (if applicable)	
3.3 Strengthen the resilience of communities and regions	Climate: Key impacts - Advance activities focused on impacts of climate	Resilence: Operational services (NOS)	Climate_Services	Climate: Inform & Support	Number of states, and territories working with the National Integrated Drought Information System (NIDIS) to incorporate frought early warning information into their drought adaptation and mitigation planning.		25	30		СРО	Veva Deheza	Wayne Higgins		Cooperative Institute for Research in Environmental Sciences (CIRES)	The performance measure is based on the number of states and territories that partner with NIDIS to incorporate drought planning activities. Activities that count toward this measure include: local or regional drought planning/management groups; use of tailored information form the U.S. Drought Portal to steakhisi drought indicators and set management triggers in state and territory drought adaptation and mitigation plans; and incorporation of information from basin specific drought monitors developed through the drought early warning information systems into either state and territory drought adaptation and mitigation plans or as part of state and territory drought adaptation and mitigation plans or as part of state and territory drought adaptation and mitigation plans or as part of state and territory drought planning and management groups.
3.3 Strengthen the resilience of communities and regions	Climate: Key impacts - Advance activities focused on impacts of climate	Resilence: Operational services (NOS)	Climate_Services	Climate: Inform & Support		Competitions for existing RISA regions as they come up for competition (2 in FY17) to ensure the continuation and evolution of the RISA framework to address integrated research, regional needs, and NOAA's mission areas.				СРО	Caitlin Simpson	Wayne Higgins		CIMMS CIRES CILER CIMEC	NOAA's Regional integrated Sciences and Assessments (RISA) program supports research teams that help expand and build the nation's capacity to prepare for and adapt to climate variability and change. Central to the RISA appracad are commitments to process, partnership, and trust building. RISA teams work with public and private user communities.
5.2 Support a customer service-oriented culture	Climate: Info/Tools - Improve communication	Org Excellence: Alignment of R&D to support NOAA (OAR)	Climate_Literacy	Climate: Inform & Support	10% growth per year in number of visits to NOAA Climate.gov Portal over previous year		10%	25%		СРО	David Herring	Wayne Higgins		NA	This performance measure will show the ongoing increase in the number of unique visits per month to the Portal. It indicates the growing value in terms of the number of new people accessing the information and tools on the website.
5.2 Support a customer service-oriented culture	Climate: Info/Tools - Improve communication	Org Excellence: Alignment of R&D to support NOAA (OAR)	Climate_Literacy	Climate: Inform & Support	Percentage improvement in the Quality of Relationship between engagement personnel and the public they serve [This is a biennial measure]		77	77.5	77.5 is our average QoR score for FY17, which slightly exceeds target. Overall, Climate gov exceeds the government website benchmark scores in the following categories: content, navigation, look and feel, and search.	СРО	David Herring	Wayne Higgins		NA	The best way for a federal science and services agency to understand its publics, and to facilitate their understanding and use of its groutest and services, is built and maintain relationships. The Quality of Belationship (Qost) instrument measures, and is comprised of, the following five elements: awareness, strust, satisfaction; usefusability, and control mutuality. Use the American Customer Statisfaction index, the Qost instrument produces an index score from 0-100. The Climate Portal's initial "baseline" Qost score in FY12 way F2.6. Because it is both costly and time consuming to measure Qost, we plan to make updated measurements every other year, which gives us the intervening years to apply what we learn to the Portal's designs, cope, and functionality before we begin the next measurement cycle. Our performance target will be to increase by 2 index point over the previous measure in subsequent years, as shown in this row (left).
5.2 Support a customer service-oriented culture	Climate: Info/Tools - Improve communication	Org Excellence: Alignment of R&D to support NOAA (OAR)	Climate_Literacy	Climate: Inform & Support	10% growth per year in number of visits to the Climate Resilience Toolkit over previous year.		10%	76%		СРО	David Herring	Wayne Higgins		NA	This performance measure will show the ongoing increase in the number of unique visits per month to the Climate Resilience Toolkit website. It indicates the growing value in terms of the number of new people accessing the information and tools on the website.
5.2 Support a customer service-oriented culture	Climate: Info/Tools - Improve communication	Org Excellence: Alignment of R&D to support NOAA (OAR)	Climate_Literacy	Climate: Inform & Support		Climate.gov: Develop a new model for climate workshops for formal and informal educators, to support implementation of new science standards in Earth system science.		x	Completed and implemented in Q4	СРО	David Herring	Wayne Higgins		NA	CPO hosts and participate in workshops to build better relationships with our publics, and to help them find and use data and information in climate-related decisions.
5.2 Support a customer service-oriented culture	Climate: Info/Tools - Improve communication	Org Excellence: Alignment of R&D to support NOAA (OAR)	Climate_Literacy	Climate: Inform & Support		CRT: Develop and publish explanatory videos to guide Climate Explorer users through the appropriate use and interpretation of data provided through this interface.	х	х	Completed and published in Q4 of FY17	СРО	David Herring	Wayne Higgins		Cooperative Institute for Research in Environmental Sciences (CIRES)	
3.3 Strengthen the resilience of communities and regions	Climate: Info/Tools - Improve communication	Org Excellence: Alignment of R&D to support NOAA (OAR)	Climate_Literacy	Climate: Inform & Support		Climate Resilience Toolkit (CRT): Build a new 'Regions' section in the CRT, with corresponding regional virtual teams to review and populate each regional subsection. Publish at least 4 Regions in FY17.	x	х	Regions section built with 3 regions included; 4 new regions still to be added	СРО	David Herring	Wayne Higgins		NA	Purpose is to engage communities and businesses to use CRT region-focused information and tools to make resilience plans and act on those plans. Three major objectives of this region-focused effort: 1. Establish region theme teams. 2. Populate regional sections on the CRT 3. Scale up level of engagement using the CRT to address regional and local needs.
3.1 Advance understanding of environmental change	Climate: ESM - Develop seasonal outlooks	NWS: National Weather Service (NWS)	OA_HighPerfOrg	Climate: Inform & Support		Develop and execute the CPO components of the FY17 OAR-NWS Weather-Water-Climate and FY17 OAR-NESDIS Service Level Agreements.	х	x		СРО	Paul Hirschberg	Wayne Higgins		NA	NWS and OAR signed a Memorandum of Understanding (MOU) establishing a new/improved framework for the NWS Climate Services Program and OAR Climate Program Office (DPO) to advance end-to-end climate services research, transition, and operational delivery (R2O). An annual Service Level Agreement (SLA) codified FY15 funding provided by OAR to NWS in support of the MOU.
3.1 Advance understanding of environmental change	Climate: Info/Tools - Improve communication	Org Excellence: People, teams, and tools (DUS-O)	OA_HighPerfOrg	Climate: Inform & Support		Issue CPO Annual Report for FY16			Completed and delivered in Q2	СРО	David Herring	Wayne Higgins		NA	This report will give an overview of CPO's achievements in FY16.
5.1 Empower and engage employees	Climate: Info/Tools - Improve communication	Org Excellence: Alignment of R&D to support NOAA (OAR)	OA_HighPerfOrg	Climate: Inform & Support		Support early-career scientists. Select new Fellows for both the PACE and NOAA Climate and Global Change (C&CC) Postdoctoral Fellowship Programs. Hool Hollings Fellows and Sea Grant Fellows.		Partial completio n	Due to budget constraints, CPO was unable to fully fund a class of 8-10 new felllows in FY17 but completed its obligations to the graduating class and committed to funding a reduced new class of fellows.	СРО	James Todd	Wayne Higgins		NA	This is a Diversity and Inclusion milestone that was submitted to OAR. PACE – PostDocs Applying Climate Expertise – is a postdoctoral fellowship program to grow the pool of scientists qualified to transfer advances in climate science and climate prediction into climate-related decision framework(s) and decision tools. The purpose of the MOAA Climate and Global Change Postdoctoral Fellowship Program is to help create and train the next generation of leading researchers needed for climate studies; it endeasors to attract recent PhDs with research interests in areas relevant to the NOAA climate science and services program. The Sea Grant Knauss Fellowship provideseducational and professional experience to graduate students who have an interest in coexa, costat and Great Laker services and in the national policy decisions affecting those resources. The Ernest F. Hollings Undergraduate Scholarship Program provides support and multidisciplinary learning experiences for under-graduate students which interested in pursuing research, public service, or teaching careers in the oceanic and atmospheric sciences.
5.1 Empower and engage employees	Climate: Info/Tools - Improve communication	Org Excellence: People, teams, and tools (DUS-O)	OA_HighPerfOrg	Climate: Inform & Support		Complete data collection and anaylsis for the CPO Workforce Plan, and develop a managment tool that incorporates CPO-wide job duty information, knowledge management and succession planning				СРО	Shannon Louie	Wayne Higgins		NA	This is a Diversity and Inclusion milestone considering information to promote diversity in hiring decisions and succession planning.
5.1 Empower and engage employees	Climate: Info/Tools - Improve communication	Org Excellence: People, teams, and tools (DUS-O)	OA_HighPerfOrg	Climate: Inform & Support	Develop and support diversity and inclusion committees and implement FY17 Diversity and Inclusion actions described in the plan for committees.		х	х		СРО	Neil Christerson	Wayne Higgins		NA	Sub-committees include: : Diversity Training, Professional Development, Team Building, Improving communication and transparency, Inclusion of non-Feds, Outside of the offices Activities and Incorporating D/I principles into the FFO.
5.2 Support a customer service-oriented culture	Climate: Info/Tools - Improve communication	Org Excellence: Alignment of R&D to support NOAA (OAR)	OA_HighPerfOrg	Climate: Inform & Support	Process 100% of CPO grants by June 30			х		СРО	Eric Locklear	Wayne Higgins		NA	
5.2 Support a customer service-oriented culture	Climate: Info/Tools - Improve communication	Org Excellence: Alignment of R&D to support NOAA (OAR)	OA_HighPerfOrg	Climate: Inform & Support	Property is accounted for as evidenced by a reported inventory accuracy rate of at least 85-95% with no more than 5% of accountable property designated as not found or missing.		х	x		СРО	Eric Locklear	Wayne Higgins		NA	

FY17 CPO	Annual Operat	ing Plan													
DOC Strategic Plan Objective	5-Year Research Plan Goal: Objective - Target	NOAA Annual Guidance Memo Priority	NGSP Goal: Objective (if applicable)	OAR Strategic Plan	Perform (NOTE: Do not report Measure or I			E: Do not re	easure or Milestone Targets eport Measure or Milestone Targets in the same row)	PRIN	IARY RESPONSI	BILITY	NOAA		PERFORMANCE MEASURE and MILESTONE DESCRIPTIONS
(if applicable) Please use the pull-down menu to select the objective	Please use the pull- down menu to select the objective	Please use the pull-down menu to select the objective	Please use the pull-down menu to select the objective	Please use the pull-down menu to select the objective	Measure (The monitoring of ongoing progress toward preestablished goals.)	Milestone (A distinct activity planned for completion on a scheduled date)	17 Q4	Actual 17 Q4	Why was the target missed? When will the target be completed? What is the risk of missing the target?	Unit within LO/SO	Point of Contact	Responsible SES	gion (if applicable)	CI Partner (if applicable)	
3.1 Advance understanding of environmental change	Climate: Info/Tools - Improve communication	Org Excellence: Alignment of R&D to support NOAA (OAR)	Climate_Scientific	Climate: Inform & Support		Support the Global Framework for Climate Services by co-leading the execution of a transboundary workshop under NACSP that is leading to improvements in climate services for drought and wildfires and the development of manuscripts.				СРО	Meredith Muth	Wayne Higgins		NA	Lead activities for the North American Climate Services Partnership, including manuscripts on lessons learned for transboundary collaboration on climate services
3.1 Advance understanding of environmental change	Climate: Record - Observing Systems	Org Excellence: Alignment of R&D to support NOAA (OAR)	Climate_Scientific	Climate: Inform & Support		Installation of co-located GPS for 8 GLOSS tide-gauge stations (5 in the US and 3 internationally).	х	Milestone Not Met	Reliant on funds from NOS who was unwilling to commit to the project	СРО	Emily Smith	Wayne Higgins		NA	
3.1 Advance understanding of environmental change	Climate: Key impacts - Advance activities focused on impacts of climate	Org Excellence: Alignment of R&D to support NOAA (OAR)	Climate_Scientific	Climate: Inform & Support		Complete the draft of the Arctic Research Program Strategic Plan	x	Milestone Not Met	This has been moved to a deliverable for FY18. There was too much uncertainty in the budget this year to complete the draft strategic plan.	СРО	Jeremy Mathis	Wayne Higgins		Cooperative Institute for Arctic Research (CIFAR) Joint Institute for the Study of the Atmosphere and Ocean (JISAO)	
3.1 Advance understanding of environmental change	Climate: Key impacts - Advance activities focused on impacts of climate	Org Excellence: Alignment of R&D to support NOAA (OAR)	Climate_Scientific	Climate: Inform & Support		New Ocean relevant indicators added to USGCRP system		Milestone partially met	CPO work toward this milestone is complete (submission package sent through USGCRP and approved by IndiWG); milestone not met due to actions required by entities outside CPO.	СРО	Jennifer Salem Arrigo	Wayne Higgins		NA	LISCER, ICF has delayed adding new indicators to the system. Ocean relevant indicators have been submitted by NOAA through the USGCRP IndINVS working group, submission has been reviewed and signed off on by IndINVS, action is now with ICF and the Asheville TSU to implement in the system. Take home: our work toward this milestone is complete (submission package sent through USGCRP and approved by IndINVS, milestone not med due to actions required by entities outside CPO.
3.1 Advance understanding of environmental change	Climate: Key impacts - Advance activities focused on impacts of climate	Org Excellence: Alignment of R&D to support NOAA (OAR)	Climate_Scientific	Climate: Inform & Support		Commence FIREX related research activities with instrument testing and measurements of fire emission factors at the Missoula Fire Science Laboratory.				СРО	Ken Mooney	Wayne Higgins		Cooperative Institute for Research in Environmental Sciences (CIRES)	The Fire Influence on Regional and Global Environments Experiment (FIREX) is a field campaign designed to understand and predict the impact of North American fires on the atmosphere and to support better land management to help prevent them from occurring.
3.1 Advance understanding of environmental change	Climate: Record - Observing Systems	Org Excellence: Alignment of R&D to support NOAA (OAR)	Climate_Scientific	Climate: Predictions		Advance week-3 to seasonal forecast capability by initiating new research projects and a new S2S Prediction Task Force	х	x		СРО	Heather Archambault	Wayne Higgins		NA	The Subseasonal to Seasonal (S2S) Prediction Task Force to advance NQAA's and the Nation's capability to model and predict sources of S2S predictability. The ultimate goal of this initiative is to help close the gap in prediction skill and products between traditional weather and seasonal lead times.
3.1 Advance understanding of environmental change	Climate: Info/Tools - Improve communication	Org Excellence: Alignment of R&D to support NOAA (OAR)	Climate_Scientific	Climate: Inform & Support		Through US CLIVAR partnership, support the international US AMOC Science Meeting for understanding of the current state of AMOC science, identifying scientific gass, and development of plans to fill those gaps. Disseminate the meeting report publicly.	x	x		СРО	Sandy Lucas	Wayne Higgins		Cooperative Institute for Marine and Atmospheric Studies (CIMAS)	
3.3 Strengthen the resilience of communities and regions	Climate: Info/Tools - Improve communication	Org Excellence: Alignment of R&D to support NOAA (OAR)	Climate_Literacy	Climate: Inform & Support		Contribute to and support the development of a climate and fisheries dashboard for the northeast region.				СРО	Adrienne Antoine	Wayne Higgins		NA	As part of the Climate Impacts on Fish, a two year project was funded in FY16 to support the development of a climate and fisheries dashboard for the NE. The project was funded in FY16 and work started in FY17. The research project will be completed by the end of FY18.
3.3 Strengthen the resilience of communities and regions	Climate: Info/Tools - Improve communication	Org Excellence: Alignment of R&D to support NOAA (OAR)	Climate_Literacy	Climate: Inform & Support		Develop new Urban section on the Climate Resilience Toolkit				СРО	Nancy Beller- Simms	Wayne Higgins		NA	
3.3 Strengthen the resilience of communities and regions	Climate: Info/Tools - Improve communication	Org Excellence: Alignment of R&O to support NOAA (OAR)	Climate_Scientific	Climate: Inform & Support		Complete a baseline vulnerability and impact assessment focused on livelihoods and communities in Bihar, India, and indiate the development of an experimental tailored sub-assonation and seasonal climate information report, based on the assessment, in partnership with regional, national and local organizations in India.	x	Partial	Due to some issues involving our local partners, some of the work has been delayed until P138. Baseline data has been collected from livelihood survey of 6600 households in 264 villages of two drought-prone and 2 flood-prone districts in Bihar. An additional 264 surveys were conducted of village leaders to gain insights at the Village level. Intoitial assessment of survey data has been completed, the analysis is informing the production of tailored seasonal and sub-seasonal climate, and weather products for the four district, for the four district, for the Four district, for the Four districts for the Four districts.	СРО	Lisa Vaughan	Wayne Higgins		NA .	in partnership with the Regional Integrated Multi-Hazard Early Warning System for Africa and Asia (RIMES), the India Meteorological Department, and Agricultural Extension agents based in Bilhar, the experimental tailored sub-seasonal and seasonal climate information will be provided to select villages in the 4 Bihar districts, beginning just before the onset of the 2018 summer mosson, and continuing through the mosson period. Analysis of all the data collected, along with the "intervention" of climate information provided will be used to produce both a vulnerability assessment and an assessment of the impact on livelihoods of the tailored climate information provided.

	al Operatir		Perfo	rmance											Measure or h	filestone Targets													
Priorities Primary	Priorities Secondary (if applicable)	OAR Strategic Plan	(NOTE: Do not report Measure or	Milestone Targets in the same row)			Weather Act		Actuals		Target	ctual	Target	Actual	(NOTE: Do not report Measure o	Milestone Targe Target Actual	ts in the same row)	Target	Actual	T	FY-19 Targets	Futur	e FY Targets	P	RIMARY RESPONS	BILITY	+		
Please use the pull-down menu to select the objective	Please use the pull-down menu to select the objective	Please use the pull-down menu to select the objective	Measure (The monitoring of ongoing progress toward pre- established goals.)	Milestone (A distinct activity planned for completion on a scheduled date)	Quarterly Cumulative	Cumulativ e Across Years	Please check the box if your measure/ milestone is linked.) 11 12	13 14	15 16	17 18 Q1	Why was the target missed? When will the target be completed? What is the risk of missing the target?		18 Q2	Why was the target missed? When will the target be completed? What is the risk of missing the target?	18 18 Q3 Q3	Why was the target missed? When will the target be completed? What is the risk of missing the target?	18 Q4	Why was the target misse: When will the target be completed? What is the risk of missing t target?	_	19 19 Q2 Q3		21 22 25	10/50	Point of Conta	ct Responsibl SES	NOAA agion e (if applicable)	CI Partner (if applicable)	PRIFORMANCE MEASURE and MILESTONE DESCRIPTIONS
Environmental int	Social & Behavioral research	Stakeholder: Communicating science	10% growth per year in number of visits to NOAA Climate.gov Portal over previous year.		2		□ NA	A 10% 639	6 53% 751	83% 27%	25% 10%	2.7%	10%	8.8%		10% 6.2%		10%	8.4%			10% 10%109	d1096109610	м сро	David Herrin	Wayne Higgins			This performance measure will show the ongoing increase in the number of unique visits per month to the Portal. It indicates the growing value in terms of the number of new people accessing the information and tools on the website.
Environmental int	Social & Behavioral research	Stakeholder: Communicating science	10% growth per year in number of visits to the Climate Resilience Toolkit over previous year.		■	Ø	□ NA	A NA NA	NA NA	NEW 72%	76% 10%	7.3%	10%	16.1%		10% 17.1%		10%	14.5%			10% 10%109	10%10%10	K CPO	David Herrin	Wayne Higgins			This performance measure will show the ongoing increase in the number of unique visits per month to the Climate Resilience Toolkit website. It indicates the growing value in terms of the number of new people accessing the information and tools on the website.
Environmental info	Weather forecasting & climate predictions	Climate: Inform & Support	Number of assessment reports or integrated plans developed or implemented across NOAA programs to enhance NOAA climate services.		0	☑	0			6 8	5							4	4			4 4 4	4 4 4	CPO	Ben DeAngel	Wayne Higgins			This performance measure shows CPO's major contributions to and completion of assessments and demonstrates the role of formal published climate change assessments in decisions to address climate change impacts. Business, government, and the public use these assessments to improve their climate resilience.
Weather forecasting & climate predictions	Environmental info	Climate: Variability		Complete the CPO FY18 Federal Funding Opportunity (FFO) with at least 6 new competitions.			•			NEW 9	8 🗆	0	0	0		0 0		6	11			6 6 6	6 6 6	CPO	Paul Hirschbe	Wayne Higgins			CPO's external grant programs, including funding opportunities address key information needs related to climate research, modeling, and the impacts of climate change on communities, infrastructure, and economies.
R2A	Weather forecasting & climate predictions	Climate: Predictions	Annual number of advances in climate and weather research and information products transitioned to a new stage (development, demonstration, or application) to improve earth system understanding and provide information to private and public sectors.		0	2	☑			NEW 27	23							10	16			10 10 10	10 10 10	CPO	Neil Christers	n Wayne Higgins			CPO supports research and development projects within NOAA and with external partners to be transitioned to operations and applications to advance NOAA's mission areas and refuses adverse effects of enricommental exercis on people and operatiny. Note: The target was reduced from 22 in PT47 to 10 in PT48 because the number of antisipated R2A transitions was lower for CPO programs.
Partnerships & Cooperative agreements	Early Warning info	Climate: Inform & Support	Number of states, and territories working with the National Integrated Drought Information System (NIUS) to incorporate drought early warning information into their drought adaptation and mitigation planning.		0	2	_ n/:	a n/a 4	5 7	15 20	37 NA	NA.	NA	NA		NA NA		37	40				37 37 37	CPO	Veva Deheza	Wayne Higgins			The performance measure is based on the number of states and tractions that perform with MOS to improvate design for several policy manipulation of the MOS to improvate design for several policy manipulation of the count toward the measure michile food or regional drought painwaight management groups, use of the several policy and performance of the measure of the several policy several policy several policy several policy several performance or several policy severa
Weather forecasting & climate predictions	Environmental info	Climate: Variability	Annual number of new research awards to improve climate understanding, prediction, and information.		0	■	2			70 59	78							50	87			50 50 50	50 50 50	CPO	Neil Christers	n Wayne Higgins			CPU's external grant programs, including uniding opportunities address say information needs related to climate research, modeling, and the impacts of climate change on communities, infrastructure, and economies.
Ecosystem processes & change	Environmental info	Oceans: Environmental changes		Complete phase 1 of strategy building process for the Climate Impacts on Fisheries Program by hosting a series of strategic conversations with relevant OAR and NMFS labs and programs.					000	0 0	0	0	0	0		0 0		2	Initiated but not complete: Meeting about next steps for program planned for Nov/D 2018.	the	0 0		000	CP0	Adrienne Antoine	Wayne Higgins			The Coastal and Ocean Climate Applications (COCA) program addresses the needs of specific decision makers grapping with pressing climate-related issues in coastal and marine environments. This program strengthens initiative—initially developed under the Sectoral Applications Research Program — to support interdisciplinary applications research aimed at addressing climate-related challenges in coastal communities are well as coastal and marine ecosystems.
Weather forecasting & climate predictions	Ecosystem processes & change	Oceans: Environmental changes		Establish Marine Task Force to investigate seasonal prediction of coastal sea level and living marine resources.			0 0		00	0 0			0	0		0		0	0	0	0 0	000	000	CPO	Annarita Mariotti/sin Huang	Wayne Higgins			
Environmental info	Weather forecasting & climate predictions	Climate: Inform & Support		Complete the Climate Science Special Report (CSSR)			0		0	0	0	0	2	S		0				0	0	000	000	CPO	Ben DeAngel	Wayne Higgins			The Climate Science Special Report provides the scientific basis for the quadrennial National Climate Assessment.
Partnerships & Cooperative agreements	Social & Behavioral research	Climate: Inform & Support		Complete four competitions on climate- societal impacts: 1) re-competition of the south-central BSA region, 2) RISA/COCA pilot of coastal climate extension specialists, 3) decision support research on climate-sensitive health (IRAP), and 4) water sector research on extreme events represendences and coping with drought.						0	0		0	0		8	Competitions held for 1-3. #4 on the water sector was postponed.	0		0	0	0 0 0	000] CPO	Caitlin Simpso	n Wayne Higgins			CPC's external groot programs, including funding opportunities address key information needs estated to climate research, modeling, and the impacts of climate charge on communities, infrastructure, and cancennies. This competion is floured on establishing or recompeting a RSA in one region (to be determined).
Environmental info	Weather forecasting & climate predictions	Climate: Inform & Support		Complete the fourth order draft of NCA4.			0 0		00	0 0	<u> </u>	0	0	0		2	Mostly complete. USGCRP is waiting for approval from DOC/NOAA (as of July 16, 2018).	0	0	0	0 0	000	000	CPO	Dan Barrie	Wayne Higgins			The National Climate Assessment is a Congressionally-mandated report required to be produced every four years and provides a national assessment of the climate science and the impacts of climate change and variability impacts on the U.S.
Environmental int	Social & Behavioral research	Stakeholder: Communicating science		Update 'Climate Explorer' with LOCA dataset, adding "15 new climate variables, and an ability to monitor threshold exceedance over time.			0 0			0 0			0	0		0 0		0	0	0	0 0	0 0 0	000	CPO	David Herrin	Wayne Higgins			The Climate Explorer offers graphs, maps, and data of observed and projected temperature, perceiptation, and related climate variables for every county in the configuous United States. The tool shows projected conditions for two possible futures: one in which humans make a moderate attempt to climate projected conditions for two possible futures: one in which humans make a moderate attempt to reduce global emissions of heat trapping pases, and one in which we go on conducting business as usual.
Environmental int	Social & Behavioral research	Stakeholder: Communicating science		Expand the CRT's scope by completing build-out of the 'Regions' section and by adding StoryMaps allowing users to explore exposure to climate-related hazards.						0 0	<u> </u>	0	0	0		0 0		2			0 0	o o c	000	с сро	David Herrin	Wayne Higgins			and contribute impacts on the U.S. The Cinnate Experien rising graphs, reage, and data of observed and projected temperature, the tool projected contributed in the contributed of the contributed in the
Environmental int	Social & Behavioral research	Stakeholder: Communicating science		Complete Phase 3 redesign and rebuild of NOAA Climate.gov, with responsive design and enhanced semantic search capability that clusters related content.			0 0			0 0		0	22	0		0 0		0	0	0	0 0	000	000	CPO	David Herrin	Wayne Higgins			NOAA Climate gov is a source of timely and authoritative scientific data and information about climate. Our goals are to promote public understanding of climate science and climate-related events, to make our data products and services easy to access and uses, to provide climate-related support to the private scarcor and the Nation's excoming, and to serve people making climate-related decisions with tools and resources that help them answer specific questions.
Program Mgmt	Environmental info	Climate: Inform & Support		Process 100% of CPO grants by June 30.					00	0 0	o o	0	0	0		2		0	0	0	0 0	0 0 0	000	CPO	Eric Locklea	Wayne Higgins			
Environmental info	Long-term obs	Climate: State of system		Complete the Annual Arctic Report Card			0 0		00	2 2				0		0 0			0	52	0 0		2 2 2	CPO	Jeremy Math	s Wayne Higgins			The record report using viewwaretti, and is updated annually As in previous years, the 2015 update to observations throughout the Arctic, and is updated annually As in previous years, the 2015 update to the Arctic Report Card highlights the changes that continue to occur in both the physical and biological components of the Arctic environmental system.
Environmental info	Marine resources mgmt	Climate: Inform & Support		Complete the Arctic Research Program Strategic Plan			0 0			0 0	0 0		0	0		0 0		2	This milestone was not completed in FY18 but plan complete in FY19, following program review, pending approval of a detailee.	ito 🗆	0 0	o o c	000	CPO	Jeremy Mathis David Legler	/ Wayne Higgins			COYs research and development areas. As lett Report Code was active and supplying trained (consider a range of environmental observation throughout the Actic, and is updated annually, As in privilecy servar, the 2015 update to the Actic Report Code Report of the Servar, and is updated annually, As in privilecy servar, the 2015 update to the Actic Report Code Report Report of the Servar Report Report (Servar Report Rep
Long-term obs	RZA	Climate: State of system		Complete the Tropical Pacific Observing System 2020 Salidrone Pilot Project Mission (NASA SPURS-2 and test along 125W)			0 0			0 0			0	0				2	☐ Completed Q3 FY18	0	0 0	.	000	CP0	Kathy Tedesc	Wayne Higgins			The TPOS 2020 Project will evaluate, and where necessary change, elements that contribute to the tropical Pacific Observing System (TPOS) based on a modern understanding of tropical Pacific science. The project aims for enhanced efficiences for all stateholders, informed by the development and requirements of the operational prediction models that are primary users of TPOS data. This particular project evaluates a new technology for potential use in the upgraded Tropical Pacific Observing System.
Long-term obs	Environmental info	Data: Observing systems		Complete the update of the Surface Ocean CO2 ATIas (SOCAT) Database						0 0	<u> </u>		0	0				2	Completed Q3 FY18	0	0 0	.	000	CPO	Kathy Tedesc	Wayne Higgins			SOCAT data are released in versions. Each outcreding version contains need data ete: as well as updates of older ones. The first version of SOCAT was released in 2011, the second and third version followed benerially. Automation allowed armoul public releases since version 4. The latest SOCAT version (version 5) has 21.5 million observations from 1957 to 2017 for the global oceans and coastal seas. SOCAT version 6 will be released in cummer 2018.
Long-term obs	Environmental info	Climate: State of system		Complete the GO-SHIP Repeat Hydrography Section IO7N			0 0			0 0	0 0	0	2	Delaye d to Q3	Due to delays of the Ron Brown, this activity is now sheduled to be complete by June 6 (Q3).			0	0	0	0 0	o o c	000	CPO	Kathy Tedesc	Wayne Higgins			other users and collectors of ocean interior data, and coordinates a network of globally sustained
RZA	Weather forecasting & climate predictions	Climate: Predictions		Complete the CPO components of the Service Level Agreements with NWS and with NESDIS, which supports advances in NOAA climate information, services and products Complete an analysis of the CVP-funded						0 0	<u> </u>	0 0	0	0		2		0	0	0	0 0	0 0 0	000	СРО	Paul Hirschbe	Wayne Higgins			hydrographic section as part of the global occasificinates observing system including physicial concessingsight, the carbon cycle, marine belochemistry and econogram-consciousded 16, MNS and MSDGs, a defined under Service towal Agreements that articulate requirements and deliverables. NNS and CMAR Signals Americanism of Understanding (MDDI) establishing a new/Improved framework for the NNS Cimited Services Programs and CMA Climate Program Office (CPO) to advance end-to-end climate services—research, seations, and operational delivery 2016.
Weather forecasting & climate predictions	Environmental info	Climate: Inform & Support		Complete an analysis of the CVP-funded projects that describe the scientific advancements in understanding of tropical convection, the coupled ocean- atmosphere-land-ice system, and persistent model biases (e.g., DYNAMO, AMOC, and Pacific Ocean Biases).			0 0		0 0	0 0	0 0		0	0		0 0		2			0 0	0 0 0	000) CPO	Sandy Lucas	Wayne Higgins			
Weather forecasting & climate predictions	Environmental info	Climate: Predictions		Hold three FY18 competitions to advance NOAA's Earth System models, data assimilation, and Subseasonal to Seasonal (S2S) prediction capabilities for the CPO/Modeling, Analysis, Predictions and Projections Program						0 0	0		0			0 0		2		0	0 0		000] CPO	Annarita Mariotti/Sin Huang	Wayne Higgins			O'O's external grout programs, including funding opportunities address key information needs related to climate research, modeling, and the impacts of climate change on communities, infrastructure, and excommiss. This comprehens to focusion do modeling, predictions, and projections in the areas of NOMA's Earth System models, data assimilation and SSS prediction capabilities.

FY18 An	ual Operati	ng Plan																										
OAR Corporat Priorities	OAR Corporate Priorities Secondary	OAR Strategic		ormance or Milestone Targets in the same row)			Weather								(NOTE: Do not report Measure		ets in the same row)							PRIMARY RE	SPONSIBILITY	_		
Primary Please use the pull-down men to select the objective	(if applicable) Please use the pull-down menu to select the objective	Please use the pull-down menu to select the objective	Measure (The monitoring of ongoing progress toward pre- established goals.)	Milestone (A distinct activity planned for completion on a scheduled date)	Quarterly Cumulative	Cumulativ e Across Years	Please check the box if your measure/ milestone is linked.	10 11	12 13	14 15	16 17	18 18 Q1 Q1	Why was the target missed? When will the target be completed? What is the risk of missing the target?	18 1 Q2 Q	Why was the target missed? When will the target be completed? What is the risk of missing the target?	18 18 Q3 Q3	Why was the target missed? When will the target be completed? What is the risk of missing the target?	ζ.	Why was the target missed? When will the target be completed? What is the risk of missing the target?	19 19 Q1 Q2	19 19 Q3 Q4	19 20 21 2	23 Unit w		of Contact Responsib	NOAA egion de (if applicable)	CI Partner (if applicable)	PERFORMANCE MEASURE and MILESTONE DESCRIPTIONS
Workforce	Program Mgmt			No less than 85% of CPO mission-critical positions covered by CPO Worldorce Plan.			0	0 0	0 0	0		0		0 0	3	0 0		2	✓	0	0 0	000) () (P)) Ben D	eAngelo Wayne Higgins			This is an SEX-required milections. The Climate Program Office (CPC) will improve its Workforce Plan to pursue BDNs of mission-critical vacacries are filled, defined, and consistent with DAR goals and priorities. Mission intellig positions are bend that must be filled in order for the agency to perform its core mission. CPC could not achieve its mission without all of its employees.
Environmenta info	Long-term obs	Climate: Inform & Support		Complete the Annual (2017) State of the Climate Report			0	0	0 0	0 0		0		0 0	0	0 0		2	■	0	0 0	000) () (P)	D David	d Legler Wayne Higgins			CPO Sirectly supports the development and production of the BAMS State of the Clinical Report. Ocuan, atmospheric, and ecosystem data and products supported by CPO and ONR are analysed, assessed, and contributed to the Report.
Program Mgn	Environmental info			Property is accounted for as evidenced by a reported inventory accuracy rate of at least 85-95% with no more than 5% of accountable property designated as not found or missing.			0	0 0	0 0	0 0		0 0		0 0	3	0 0		22	■	0 0	0 0	0000	OP) Eric L	ocklear Wayne Higgins			
Environmental	Partnerships & fo Cooperative agreements	Stakeholder: Communicating science		Support select school districts' implementation of the climate-related new science education standards in FY18 by leveraging the educational investments in the CLEAN collection, Climate.gov, and related partner projects.			0	0 0	0 0	0 0		0 0		0 0		0 0		2	☑	0	0 0	000) [] CP1) Frank	Niepold Wayne Higgins		Cooperative Institute for Research in Environmental Sciences (CIRES)	The Climate Literary and Energy Awareness Network (CLAIA) Portal was baunched in 2010 as a National Science Digital Literary (MICRO) Perhawar propriet. It is dely the science deluction expertice of EREC, the Cooperative Institute for Research in Invariant Science (CRES) at the University of Colorado Science (CRES) at the University of Colorado Science (CRES) and the University of Colorado Science (CRES) and the University of Colorado Science (CRES) and the University of CRES Science (CRES) and CRES Science (CRES) Science (CRES)
Partnerships 8 Cooperative agreements	Environmental info	Climate: Inform & Support		Plan and execute the first Global Heat Health Information Network (GHHIN) Forum in partnership with the Global Framework for Climate Services (GFCS).			0	0 0	0 0	0 0		0 0		0 0	3	0 0		22	GHHIN Forum scheduled for Dec 17-20, 2018 (Q1 FY19) in Hong Kong. We had to push the date to December at the request of our local hosts and some of our key participants.	0 0	0 0	000) [] (P)	iluk C	Trtanj Wayne Higgins			The Olded Heat Health information Network (GHHM) is an independent, voluntary, member driven formun of scientists, professionals, and policy privates Scound on enhancing and multiplying the global & local searning, and reciliance-building for heaf health, GHHM seeks to be a catalyst, thouskedge brokes, VMWO (GCCS); a sithe clinitative separationed by WMMO regular the development and application of science-based drivates information and services in support of decision-making in climate sensible extors.
Weather forecasting & climate predictions	Partnerships & Cooperative agreements	Climate: State of system		Plan and execute the biennial North American Drought Monitor (NADM) Forum with the North American Climate Services Partnership (NACSP) for a joint meeting in 2018.			0	0 0	0 0	0 0		0 0		0 0	3	0 0		2	☑	0 0	0 0	000) [] (P)) Mered	Sth Muth Higgins			The horsh America Drought Montor (MAMA) is a coopparative effort between drought experts in Canada, Makica and the billed States to monther drought arous the continued on an oniging basis. The MAMA is based on the highly accessful U.S. Drought Montor (pOSADA, and as such, is being developed to proude MACQFF as minoral territorial parameters) between the U.S., Mean code Canada. The generative size established to respond to an increasing demand for accessible and timely scientific, data and information or order to make informed decisions and build redisease in the U.S. Meanments.
Long-term ob	Environmental info	Climate: Inform & Support		Complete an assessment of methane emissions data collected from U.S. oil and gas production.			0	0 0	0 0	0 0		0 0		0 0	3	0 0		2	✓	0 0	0 0	000	OP) Monik	a Kopacz Wayne Higgins			ACA has funded an Academy report that addresses the topic of methane emissions which is due to be possibilitied in the ignor QUESE. ACF Docume on quantifying emissions of greenhouse gases, amends, and their procursors, as well as their atmospheric impacts from several table plays, in the past several years, ACA has funded momerous projects classed on oil B gas entraction, complementary on opiniging NOAM/SIAS efforts in quantifying emissions from oil B gas extraction across the Nation, and their impacts on air quality and climate.
				Inform and expand partnerships (add 2 new partners outside of NOAA) of the Water Resources Dashboard through SARP-sponsored decision support research and activities.			0	0 0	0 0	0 0		0 0		0 0	0	0 0		2	✓	0 0	0 0	000		Nanc Sii	y Beller- mms			Water recourse managers and uthan planener; can use this darbhoard to access meng and data that help them monitor the potential for extreme prediction and drought in their regions. The Viter Resources Oatsboard page is dynamic; the scope and content of darbhoard entries are drien by input from user. PITES SAMP Program Manager attended the American Planening accounting two and Planening Summit as well as their Drought summit and attended Viters (Intite Allaince training, Meetings have been scholading for TSI with more justices (TRAL) RSI as very all NOSI.
Weather- feresisting & climate- predictions	Environmental- info	Stakeholder:- Communicating- science		issue-the-Climate-Program Office-2017- Annual-Report-			0	0 0	0 0	0 0		0 0		⊠ N	A CPO decided not to produce this report any more.								GPA	David	Herring Wayne			This report-will give an overview of EPG's achievements in FF&7:
Social & Behavioral research	Environmental info	Climate: Inform & Support	Percentage improvement in the Quality of Relationship between engagement personnel and the public they serve. [This is a blennial measure]			S	0	na na	0 10	76.4 NA	NA (de lay ed)	s na na	This is a biennial measure. FY19 will be the next year it is measured and reported.	NA N	A	NA NA		NA.		0 0	0 NA	81 N 83 N	85 CPI	D David	Herring Wayne Higgins			The bett was for a federal science and evenione agency to understanding and use of the feditals their orderstanding and us of the productions at evenion, to the ball and maintain instructions. The Quality of statistically Quality instrument measure, and it comprised of the following the elements; assertion, the Quality of the production of the production of the Quality of the Quality of the science in FLT seek and the Control of the Quality of the Control of the Quality of the science in FLT seek and Excellent it below the control of the Quality of the science in FLT seek and Excellent it is science in the control of the control of the way for the science in the control of the production of the production of the production of the participant or topy of the bit to increase by 2 lides point over the production reduction in subsequent years, as done in the time of the production of the production reduction in subsequent years, as done in the time of the production of the production reduction in subsequent years, as done in the time of the production of the production reduction in subsequent years, as done in the time of the production of the production reduction in subsequent years, as done in the time of the production of t
Long-term ob	Environmental info		Reduced error in Global Measurement. of Sas Surface Temperature (Degree: Cablic (FC) to improve understanding of the environment.		S	2		0.5 0.5	0.56 0.66	0.63 0.52	2 0.48	See explar ation	whall-min ??hang/MCE: Due to the data inject and cewith issues mentioned calling, we are currently parting the ST are committy parting the ST combined data internal is formed and databilized, and using a revamped/improved statched PTIS Work Plan. Que attached PTIS Work Plan. Que ambitious paid I CPI SEQ Que It is may extended to Q1.	Se expendit	Huai-min Zhang/ICEE: Our progress is very good so far, who are now also to ingest and working on output the data in KCAMCS Sheering and working on output the data in KCAMCS Sheering with the state of the second o	0.50 See expla ation	Hual-min Zhang/NCE: The drifter recovery from BURF is researched, might be recovered to the control of the cont	0.50 e	in G.4 KCII continued on making good progress on recovering issuing good progress on recovering issuing got Prit data and surring sections of the continued and continued change of prototy from that originally planned at CII (threads processing to Lockine Frozer's prit caused additional below from the CII LIMAADI described from more though the continued prototy or was showed down for the back processing of definer data, with was showed down for the back processing of definer data, with on morest buoty rows for both on morest buoty rows for both on morest body rows for both continued processing and back to but on morest body rows, for both or when the continued prototy was showed down, the SET CONTINUE of the continued prototy was showed processing and back to but on morest body rows, for both continued processing and back to but processing and back to but processing and back to but continued processing and back to but processing and back to	s o o	0 0.50	0.500.50 0.5 0.	5 0.5 CPI	David	d Legfer Wayne Higgins			This measure is intended to discurrence progress in accurately measuring the global east surface temperature (EST) using a situ diffining buyer to writy that satellite SST data are accurate and representative. This effects have improvements in course observables see if accurate the contractive progress of the course of the course of the course for according to the course of the course of the course for according to the course of the course of the course for according to the course of the
Environmental	Partnerships & Cooperative agreements	Stakeholder: Communicating science	10% growth in number of visits to Water Resources Dashboard over previous year. [Note: FY18 is the baseline year for this measure.]		0		0											10% Ba	FY18 is the first year for this measure therefore it is a baseline year. According to website data analytics, the total number of page views for FY18 is 1800.		10%	10%10%10%10	%10% CP		y Beller- Wayne mms Higgins			This performance measure will show the ongoing increase in the number of unique visits per month to the Water Resources Dashboard: it indicates the growing value in terms of the number of new people accessing the water resources information and tools on the website.
Environmenta info	Weather forecasting & climate predictions	Climate: Variability	Annual number of Climate Program Office peer-reviewed publications advancing climate understanding, predictions, and delivery of information to communities.		0	2	0			747	7 847 101	6						700	These take time for the individual CPO Divisions and Programs to compile therefore we won't have results until at least mid- November.		500	500 500 500 50	0 500 CPI	Neil Ch	Wayne Higgins			This measure tracks the results of the many CPO awards as reflected in publications that result from those awards, thus advancing the science and development in CPO's priority areas.

FY19 CI	O Annu	al Operat	ing Plan																				
Milest		IF Measure, which type?										Pe	rformance Targets and Actuals									Primary Res	ponsibility
			Performance Measure or Milestone	Description	FY-1			9 Q2		.9 Q3			FY-19 Q4 Why was the target missed?		/-20 Quart FY-20	erly Targets FY-20 F	Y-20		ture Anr				
Milestone [1]	Measure [2]	Cumulative Across Years			Target	Actual	Target	Actual	Target	Actual	Target	Actual	When will the target be completed? What is the risk of missing the target?	Q1	Q2		Q4 F	-Y-21 F	Y-22 FY	23 FY-	24 FY-2	Point of Contact	Responsible SES
✓			Complete the 2018 State of the Climate Report	CPO directly supports the development and production of the BAMS State of the Climate Report. Oceanic, atmospheric, and ecosystem data and products supported by CPO and OAR are analyzed, assessed and contributed to the Report.								Y	water the taken maning the target.) c] [David Herring	Wayne Higgins
~			Organize and implement a network-wide RISA investigators meeting	This milestone will foster greater collaboration across the 11 RISA teams spread out across the U.S. as well as ensure discussions of current and future priorities for NOAA, the RISA teams, and our partners.					✓			V	RISA meeting was held Sept 18-20 (Q4), hosted by the Pacific RISA in Honolulu, HI. Planning and logistics were largely completed in Q3, however the shutdown delayed several key activities, including securing the venue.				0	0		- C) C	Caitlin Simpson	Wayne Higgins
~			Expand NOAA Water Resources Dashboard to also target small and mid-sized water utilities and communities, as identified in a recent Dashboard user needs assessment	This expanded role was identified during a recent Dashboard user needs assessment and reflects growing value of the Dashboard to new and different types of users nationwide.					0	0	V	Y								- C] [Nancy Beller Sims	Wayne Higgins
~			Increase use and understanding of climate information for inclusion in short and long-term municipal planning.	Results from studies will document thresholds associated with climate extremes in the municipal water resources sector (Shulsk) and identify means for integrating climate change data into local plans to address increased extreme, high-precipitation events causing increased urban and riverine flooding (Schwab).							✓	Ŋ								- C) C	Nancy Beller Sims	Wayne Higgins
V			Fund cross- COCA and SARP grants to support water resource challenges within the coastal zone.	Results will include development of a community of practice with new PIs and relevant NOAA participants (e.g., NWS and Sea Grant).							✓) c		nne Antoine and Nancy Beller	Wayne Higgins
✓			Development of a preliminary global Chikungunya Risk Forecast for use in the security sector	Chikungunya is an emerging and re-emerging vector-borne disease that poses risk to civilian populations in endemic regions and to deployed Department of Defense (DoD) personnel and US citizens who travel outside of the US. This forecast product will be integrated into an existing app utilized by agencies in the defense sectors called CHIKRisk App.					✓	✓	✓		This was a 2 year project supported with FY18 funds. Preliminary forecast has been developed and will be presented in a seminar at NOAA on October 2, 2019. Project will continue into FY20.) [Lisa Vaughan	Wayne Higgins
✓			Hold ESSM Council Meeting to bring together key CPO partners and stakeholder (internal and external to NOAA) to discuss science priorities and partnership strategies.	The meeting report will inform CPO's strategic direction, particularly the ESSM's research priorities and partnership strategies over the next 1-5 years, Participants will produce a set of potential topics for joint research initiatives with multiple partners (including other programs, labs, Cooperative Institutes, etc.) to leverage capabilities and strengths, and address research agos	~	~														- c) [Jin Huang	Wayne Higgins
~			The MAPP S2S Prediction Task Force organizes an AGU's Journal of Geophysical Research- Atmospheres and Geophysical Research Letters special collection titled "Bridging Weather and Climate: Subseasonal-to-Seasonal (S2S) Prediction and publish key manuscripts reflective of research area leadership based on previously funded research	This special collection helps bring together the broad community performing \$25 R&D to share their work and accomplishments in furthering understanding of sources of predictability and utility of various forecast systems. The papers in this special collection serve as a metric of program success and milestone for \$25 science.	0				_	_	☑	>				0				- C)	Annarita Mariotti	Wayne Higgins
~			A meeting report synthesizing outcomes from the first ever NOAA General Modeling Meeting and Fair, for which MAPP staff was the leading organizer as part of NOAA's Unified Modeling Committee	The General Modeling Meeting was the first major effort to bring together the disparate modeling activities happening across NOAA to share best practices and seek collaborations. A report describing the organization of and outcomes from the meeting will be published.			~	Z									0) c] [Annarita Mariotti	Wayne Higgins
~			Complete key synthesis paper outlining climate factors affecting future conditions for living marine resources and coastal sea level of great interest to NMFS and NOS (Marine Task Force)	MAPP's Marine Prediction Task Force is working on synthesis papers to share a coordinated sense of the predictability sources available for prediction of marine ecosystems and coastal high water levels, as well as observational needs for monitoring of these systems and improved understanding.							Z	V					0		0 0	- C		Annarita Mariotti	Wayne Higgins
V			Conduct FIREX Field Campaign	Final phase of FIREX encompassing the aircraft and ground program will be undertaken, leading to quantification of emissions for western wildfires and their impact.							Z	<u> </u>) c] [Monika Kopacz	Wayne Higgins
V			Completion, public release of, and coordination around NCA4	The National Climate Assessment is a Congressionally-mandated report required to be produced every four years and provides a national assessment of the climate science and the impacts of climate change and variability on the U.S.		~	~													- C) C	Dan Barrie	Wayne Higgins
✓			Plan and Execute Global Heat Health Information Network Forum	The forum is intended to engage the global heat health community to identify critical research and operational needs	~	~														0) [Juli Trtanj	Wayne Higgins
V			Process 100% of CPO grants by Q3	Processing CPO grants by June 30 is critical to meeting NOAA grants deadlines and supporting CPO's research and development areas.) c] [Orlando Epps	Wayne Higgins
$\overline{\mathbf{V}}$			Execute CPO FY19 staffing plan								✓	V								J [Orlando Epps	Wayne Higgins
$\overline{\mathbf{V}}$			Update and finalize CPO Strategic Vision				~		✓											0] [Orlando Epps	Wayne Higgins
✓			Complete Climate and Global Change Post Doc Program Review (UCAR) (Q1)	The purpose of the program is to cultivate and train the next generation of climate researchers to deal with the copious amounts of data gathered by NOAA and other agencies and address global issues. This program has a demonstrably high return on investment; program alumin have become leaders in the field of climate science at NOAA, other government agencies, and academia.	☑	~) [Dan Barrie	Wayne Higgins
V			Represent U.S. positions on the reform process for the Global Framework for Climate Services (GFCS) at the Intergovernmental Board on Climate Services (IBCS) Management Committee Meeting (Q1), and WMO Congress (Q3)						✓	✓										0 0		Meredith Muth	Wayne Higgins

		Complete the CPO FY19 Federal Funding Opportunity (FFO)	CPO's external grant programs, including funding opportunities, address key information needs related to climate research, modeling, and the impacts of climate change on communities, infrastructure, and economies.							Z	Z										Paul Hirschberg	Wayne Higgins
		Lead CPO, OAR, NOAA and interagency contributions to 1-2 AMAP assessments and work products	This milestone reflects CPO's role in international collaboration pertaining to management of the Arctic region. AMAP is one of 6							>	~									0	Ben DeAngelo	Wayne Higgins
		Co-chair the NOAA Education Council's Education for Community Resilience Community of Practice with the NOAA Education Community, partners and grantees to identify and share effective education practices that support resilience and support transfer amongst NOAA and partners.								~	~										Frank Niepold	Wayne Higgins
<	N	Percentage growth in number of visits to Water Resources Dashboard over previous year	This performance measure will show the ongoing increase in the number of unique visits per month to the Water Resources Dashboard. It indicates the growing value in terms of the number of new people accessing the water resources information and tools on the website. In addition, there will be an effort to include small and mid-sized water communities in a revised version of the Dashboard.							5%	-27.40%	This number reflects the lack of new information added to the Dashboard in FY19. However, the site continued to receive over 100 views per month during this time, which indicates that it is still a valuable resource. We expect that this number will rise significantly as resources are added in FY20.							ם ו		Nancy Beller Sims	Wayne Higgins
N	>	Number of states, and territories working with the National Integrated Drought Information System (RIUSI) to incorporate drought early warning information into their drought adaptation and mitigation planning.	The performance measure is based on the number of states and territories that partner with NIDIS to incorporate drought early warning information into their drought planning activities. Activities that count toward this measure include: local or regional drought planning/management groups; use of tailored information from the U.S. Drought Portal to establish drought indicators and set management triggers in state and territory drought adaptation and mitigation plans; and incorporation of information from basin-specific drought monitors developed through the drought early warning information systems into either state and territory drought adaptation and mitigation plans or as part of state and territory drought planning and management groups.	-			-	-	-	39	40			-	-	40	40	40 40	40	40	Veva Deheza	Wayne Higgins
~		Number of experimental heat products on NIHHIS website	The NIHHIS Website will be used to test and secure feedback on experimental heat products and information	-	-		-	1	1	1	1		-	-	-	-	-		1	1 -	Juli Trtanj	Wayne Higgins
V		Percentage growth per year in number of visits to the Climate Resilience Toolkit over previous year.	Experimental riear products and imministration for this performance measure will show the ongoing increase in the number of unique wisits per month to the Climate Resilience Toolikit website. It indicates the growing value in terms of the number of new people accessing the information and tools on the website.	-	-	,	-	-	-	5%	35%	Over its 5-year history (FY15-FY19), the U.S. Climate Resilience Toolkit averaged 35% annual growth in visits. The target annual growth rate was 10%.		-	-	0.05	0.05	0.05 0.0	5 0.05	0.05	David Herring	Wayne Higgins
V	S	Percentage growth per year in number of visits to NOAA Climate.gov Portal over previous year.	This performance measure will show the ongoing increase in the number of unique visits per month to the Portal. It indicates the growing value in terms of the number of new people accessing the information and tools on the website.	-	-		-	-	-	5%	51%	Over its 10-year history (FY10-FY19), NOAA Climate.gov averaged 51% annual growth in visits. The target annual growth rate was 10%.		-	-	0.05	0.05	0.05 0.0	5 0.05	0.05	David Herring	Wayne Higgins
V	N	Annual number of new research awards to improve climate understanding, prediction, and information.	CPO's external grant programs, including funding opportunities address key information needs related to climate research, modeling, and the impacts of climate change on communities, infrastructure, and economies.	-	-	1		-	-	50	83			-		50	50	50 50	50	50	Neil Christerson	Wayne Higgins
N	N	Annual number of Climate Program Office peer- reviewed publications advancing climate understanding, predictions, and delivery of information to communities.	This measure tracks the results of the many CPO awards as reflected in publications that result from those awards, thus advancing the science and development in CPO's priority areas. In FY19 this will not include OOMD (GOMO).	1	-	1	1	-	-	500	550			-	-	500	500	500 50	500	500	Neil Christerson	Wayne Higgins
<		Number of assessment reports or integrated plans developed or implemented across NOAA programs to enhance NOAA climate services.	This performance measure shows CPO's major contributions to and completion of assessments and demonstrates the role of formal published climate change assessments in decisions to address climate change impacts. Business, government, and the public use these assessments to improve their climate understanding, decision making and resilience. [Northern Plains Drought Assessment,	1		4	ı	•		4	5				-	4	4	4 4	4	4	Ben DeAngelo	Wayne Higgins
\	N	Annual number of advances in climate and weather research and information products transitioned to a new stage (development, demonstration, or application) to improve earth system understanding and provide information to private and public sectors.	CPO supports research and development projects within NOAA and with external partners to be transitioned to operations and applications to advance NOAA's mission areas and reduce adverse effects of environmental events on people and property. Note: Due to transition of S2S and Obs, CPO target for R2X transitions was reduced from 10 to 6.	1		1	1	-	-	6	6			-	-	7	7	7 7	7	7	Neil Christerson	Wayne Higgins

FY20 CPO Annual Operating Plan Milestones																		
	What performance measure		Марр	ping							Current Yea	r Reporting	g					
Milestone	does this contribute to, if	OAR Strategic	NOAA level AOP	O&M action	Lab / Program			FY-20 Q1 Why was the target missed?			FY-20 Q2 Why was the target missed?			FY-20 Q3 Why was the target missed?			FY-20 Q4 Why was the target missed?	Point of Contact
	any?	Goals	NOAA IEVEI AOF	O O O O O O O O O O O O O O O O O O O	Review action	Target	Actual	When will the target be completed? What is the risk of missing the target?	Target	Actual	When will the target be completed? What is the risk of missing the target?	Target	Actual	When will the target be completed? What is the risk of missing the target?	Target	Actual	When will the target be completed? What is the risk of missing the target?	
Process 100% of CPO grants by Q3								, ,			, , , , , , , , , , , , , , , , , , ,	х	х	<u> </u>			, ,	Orlando Epps
Launch version 3.0 of the Climate Explorer to include the following new features: (1) Redesigned user interface to improve site navigation and usability, based on user feedback; (2) Extended geographical coverage to include AK, HI, and U.S. island territories; and (3) Reproduce all image maps to remove artifacts.															x	х		David Herring
Expand the Urban Heat Island mapping campaign to ten new cities in 2019, and characterize the potential to double that number of campaigns in 2020.		Make Forecasts Better							х	х								David Herring
Launch version 3.0 of NOAA Climate.gov to include the following new features: (1) Redesigned user interface to improve site navigation and usability, including mobile responsiveness; (2) Better integration of similar content from across the site's three different audience-focused sections; (3) Upgraded content management system from Drupal 7 to Drupal 8; (4) Implement robust new semantic search utility; and (5) migrate site from server at NCEI to new cloud platform at USDA.				_											x	x*	This milestone is complete with the exception of the upgrade from Drupal 7 to 8. There are major technical issues with D8 that block our forward progress. Thus, we finally decided to leapfrog D8 and proceed to using Drupal 9. Also, there have been technical challenges at the WOC. We're on target to roll out by end of Q4, but we could slip a few weeks into Q1 of FY21.	David Herring
Launch 4 international research consortia focused on climate and health in partnership with the National Science Foundation, and 12 other countries		Drive Innovative Science													х	х		Claudia Nierenberg
Complete 3 regional convening/coordination activities to advance NOAA's science, service and stewardship in the context of planning, preparedness and adaptation															х	х		Caitlin Simpson
Establish community of practice around economic impact of water resource challenges within the coastal zone.															х	х		Nancy Beller-Sims
Develop handbook of methods to increase inclusion of climate risk information in short and long-term municipal planning.															х	х		Nancy Beller-Sims
Execute CPO FY20 staffing plan															х	Х		Orlando Epps
Complete the CPO FY21 Notice of Funding Opportunity (NOFO)		Drive Innovative Science										х	х					Paul Hirschberg
CPO staff FY20 performance plans incorporate one or more milestones which directly support new CPO focus areas through resource allocation.												х	х					Ben DeAngelo
Establish partnership framework with the new USGCRP Integrated Water Cycle Group that expects to: enhance predictive understanding of the global water cycle, advance understanding of land surface hydrology, and translate water cycle science information to be more responsive to user needs [Joint milestone with the FY20 AOP for Water].				0	0				х	х								Wayne Higgins
Complete a Climate and Fisheries Management White Paper and deliver to WWCB									х	х								Wayne Higgins
Host NOAA Climate Connections Event						х	х											David Herring
Strengthen language in NOFO to facilitate more robust Diversity and Inclusion outcomes, including efforts to quantify impacts		Drive Innovative Science										х	x					Paul Hirschberg
Complete the inclusion of coastal wetlands in the Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2017												х	х					Ben DeAngelo
Lead CPO, OAR, NOAA and interagency contributions to 1-2 AMAP assessments and work products															х	х		Ben DeAngelo
Complete development of Pilot Collaboration Proposals addressing the four initial climate risk areas: Extreme Heat, Coastal Inundation, Marine Ecosystems and Water Resources									х	х								Paul Hirschberg
Begin execution of climate risk area proposals															Х	х		
As part of the CO2 Urban Synthesis and Analysis ("CO2-USA") Network project:																		
1. Hold the third of three workshops focusing on data harmonization & integration 2. Develop estimate of carbon emissions in different U.S. cities 3. Develop and disseminate and archive anthropogenic and biospheric flux inventories															x	х		Ken Mooney
Complete field phase of FIREX-AQ: collect data, hold data workshop, present, publish and transition first results															х	х		Ken Mooney
Validate SNPP/NOAA-20 CrIS satellite instrument carbon monoxide (CO) product for use in accurate tracking of air pollution and air quality forecast verification															x	x		Monika Kopacz
Working Group (ACS WG) to coordinate the development and production of new trace gas products from NOAA operational satellites						x	x											Monika Kopacz
Transition STILT model features into HYSPLIT (Need to define for non-AC4 personnel; If transition, add to R2X)									х	х								Ken Mooney

FY20 CPO Annual Operating Plan Milestones																		
			Марр	oing							Current Year	r Reportin	g					
Milestone	What performance measure							FY-20 Q1			FY-20 Q2			FY-20 Q3			FY-20 Q4	Pales of Constant
Milestone	does this contribute to, if any?	OAR Strategic Goals	NOAA level AOP	O&M action	Lab / Program Review action	Target	Actual	Why was the target missed? When will the target be completed? What is the risk of missing the target?	Target	Actual	Why was the target missed? When will the target be completed? What is the risk of missing the target?	Target	Actual	Why was the target missed? When will the target be completed? What is the risk of missing the target?	Target	Actual	Why was the target missed? When will the target be completed? What is the risk of missing the target?	Point of Contact
Develop formaldehyde (HCHO) product from NOAA-20 satellite's OMPS																		
instrument, an experimental trace gas product that could be															l x	×		Monika Kopacz
transitioned to operations by NESDIS in the future, and used as a proxy																		
for reactive chemistry and aerosol formation in the atmosphere Implement process for NOAA's role in NCA5																		Day Barria
							-								х	х		Dan Barrie
Complete State of the Climate Report for 2019															х	х		
Marine Prediction Task Force research results in a forecast framework to test outcomes from research project advances. This will inform the development of NMFS and NOS predictions.															х	x		Dan Barrie
Model Diagnostics Task Force transitions leadership, development, and coordination of software package from NCAR to GFDL, increasing NOAA															х	х		Dan Barrie
ownership and use of the diagnostics and derivative software. Principal investigators publish special collection based on MAPP-funded research, which advances S2S predictability and prediction															х	x		Annarita Mariotti
methodologies																		
Principal investigators collect observations of air-sea interactions during the intensive observation period (IOP) of the ATOMIC field campaign. (06 January to 15 February, 2020)	5	Make Forecasts Better							х	х								Sandy Lucas
Hold quarterly meetings of the CVP-TPOS Pre-Field Modeling Studies principal investigators to ensure the development of coordinated		Drive Innovative Science													х	х		Sandy Lucas
activities in support of TPOS process studies									-									
Fund research projects that will generate 7 or more observation- modeling collaborations to advance model improvement, development,			_															
and validation (initiate new research program that links obs to modeling)															х	х		Ginny Selz
Provide report from program review panel that evaluates last 5 years of program and provides recommendations on areas of opportunity for advancement in future															х	x		Ginny Selz
Hold annual ESSM Community Workshop and Council Meeting to discuss "Earth System Science Research to Enhance Resilience to Extreme Heat" by bringing together key CPO partners and stakeholder (internal and external to NOAA).						x	х											Jin Huang
Develop strategy for National Soil Moisture Monitoring Network		Make Forecasts													х	х		Veva Deheza
Hold NOAA One Health workshop to develop strategy for future heat health activites.		Make Forecasts Better													х		This workshop has been postponed until fall 2020 due to COVID19 and will be held virtually. Date is TBD.	Juli Trtanj
Deliver six regional decision support water workshops		Make Forecasts													х	Х		Nancy Beller-Simms
Expand NOAA Water Resources Dashboard to also target small and	1	better																
mid-sized water utilities and communities, as identified in a recent Dashboard user needs assessment and results from utility meetings also in FY2020	5														х	х		Nancy Beller-Simms
Develop NWM-based drought monitor product for CONUS															х	Х		Veva Deheza
Expand impact of Water Resources Dashboard through results of workshops															х	х		Nancy Beller-Simms
Develop and implement OAR component to the William M Lapenta NWS Student Internship Program to host 4 students in OAR programs/labs												x	x					Wayne Higgins

FY20 CPO Annual Operation	is i all ivicusures											
				Cur	rent Year R		-	Future .	Annual	Target	s	
Performance Measure	Description	FY-2	0 Q3		ı	FY-20 Q4						Point of Contact
		Target	Actual	Target	Actual	Why was the target missed? When will the target be completed? What is the risk of missing the target?	FY-21	FY-22	FY-23	FY-24	FY-25	
Annual number of CPO peer reviewed publications	The annual number of peer reviewed publications is an indicator of productivity and relevance and is tracked using online resources. Peer review is one of the important procedures used to ensure that the quality of published information meets the standards of the scientific and technical community.			500	600		500	500	500	500	500	Neil Christerson
AZA Index: Annual number of advances in climate and weather research and information products transitioned to a new stage (development, demonstration, or application) to improve earth system understanding and provide information to private and public sectors.	CPO supports research and development projects within NOAA and with external partners to be transitioned to operations and applications to advance NOAA's mission areas and reduce adverse effects of environmental events on people and property.	0	0	7	7		7	7	7	7	7	Neil Christerson
Number of states, and territories working with the National Integrated Drought nformation System (NIDIS) to incorporate drought early warning information into their plans	The performance measure is based on the number of states and territories that partner with NIDIS to incorporate drought early warning information into their drought planning activities. Activities that count toward this measure include: local or regional drought planning/management groups; use of tailored information from the U.S. Drought Portal to establish drought indicators and set management triggers in state and territory drought adaptation and mitigation plans; and incorporation of information from basin-specific drought monitors developed through the drought early warning information systems into either state and territory drought adaptation and mitigation plans or as part of state and territory drought planning and management groups.			40	40		40	40	40	40	40	Veva Deheza
ncrease NOAA Climate.gov content views by 5% over previous year.	We will aggregate the number of times Climate.gov-produced content is viewed across all our publicly accessible platforms to produce an aggregate metric of monthly views each quarter. In addition to individual page views on Climate.gov web pages, we will also count page views of "spin-off" products such as CLEAN, Climate Explorer, Esri Story Maps, and newsletters. We will also count Social Media Views (Twitter, Facebook, Instagram) and the number of visits to Wikipedia pages where we have placed Climate.gov visualizations. We will compile counts of views from FY19 to serve as our new baseline, and we'll produce quarterly reports of our performance compared our target (5% growth over baseline) in FY20.			5%	8%		5%	5%	5%	5%	5%	David Herring
nnual number of new research awards to mprove understanding	CPO's external grant programs, including funding opportunities address key information needs related to climate research, modeling, and the impacts of climate change on communities, infrastructure, and economies.			50	105		50	50	50	50	50	Neil Christerson
umber of assessment reports developed or nplemented	This performance measure shows CPO's major contributions to and completion of assessments and demonstrates the role of formal published climate change assessments in decisions to address climate change impacts. Business, government, and the public use these assessments to improve their climate understanding, decision making and resilience. [Northern Plains Drought Assessment,			4	4		4	4	4	4	4	Ben DeAngelo

FY21 CPO Annual Operating Plan Milestones																	
	What performance measure		Марр	ing				1			Cu	rrent Year R	· · · · · · · · · · · · · · · · · · ·				
Milestone	does this contribute to, if	OAR Strategic			Lab / Program	FY-2	21 Q1			FY-21 Q2		1	FY-21 Q3			FY-21 Q4	Point of Contact
	any?	Goals	NOAA level AOP	O&M action	Review action	Target	Actual	Target	Actual	Why was the target missed? When will the target be completed? What is the risk of missing the target?	Target	Actual	Why was the target missed? When will the target be completed? What is the risk of missing the target?	Target	Actual	Why was the target missed? When will the target be completed? What is the risk of missing the target?	
2 4000/ (5000 1.00	Annual number of new research awards to improve climate understanding, prediction, and	Drive Innovative Science									х	х					Orlando Epps
Process 100% of CPO grants by Q3 Execute CPO FY21 staffing plan and develop CPO FY22 staffing plan	information.													Х	Х		Orlando Epps
Complete the CPO FY22 Notice of Federal Funding Opportunity (NOFO)	Annual number of new research awards to improve climate understanding, prediction, and information.	Drive Innovative Science									х	х					Paul Hirschberg
Expand William M Lapenta Internship to all OAR labs and programs	Support students at all levels and early career professionals to grow the next generation of scientists													х	Х		Wayne Higgins
Create developmental opportunity for at least one student in NCAS-M to engage in OAR research	Support students at all levels and early career professionals to grow the next generation of scientists					Х	Х										Wayne Higgins
Develop plan based on CPO OHCA to address (i) intraoffice communication issues and (ii) diversity, equity and inclusion in CPO by leveraging CPO's human capital to reach underserved K12 students						х	х										Wayne Higgins
Complete report on governance structure for conduct of climate intervention studies		Drive Innovative Science						х	х								Ben DeAngelo
Strengthen language in NOFO to facilitate more robust Diversity and Inclusion outcomes, including efforts to quantify impacts; and implement new harassment reporting requirement.	Annual number of new research awards to improve climate understanding, prediction, and information.										х	х					Ben DeAngelo
Complete the CPO components of the Service Level Agreements with NWS and with NESDIS, which supports advances in NOAA climate information, services and products		Detect Changes in the Ocean and Atmosphere												х	х		Paul Hirschberg
Launch comprehensively redesigned U.S. Drought Portal - drought.gov.		Make Forecasts Better				Х	х										Veva Deheza
Implement updated 3-year Strategic Action Plans (SAPs) in all 9 NIDIS regional drought early warning systems.		Make Forecasts Better												х	х		Veva Deheza
As part of the Urban Atmosphere priority: 1. Support analysis of COVID lockdown area measurements 2. Develop estimate of pollutant emissions (and their decline) in different U.S. cities 3. Develop, disseminate and archive anthropogenic and biospheric flux inventories		Detect Changes in the Ocean and Atmosphere												х	х		Monika Kopacz
Complete field phase of AEROMMA: collect data, hold data workshop, present, publish and transition first results		Drive Innovative Science									х		This field campaign was postponed to 2023 due to COVID-19				Monika Kopacz
Commence projects analyzing COVID lockdown era (Spring-summer 2020) impacts on the atmosphere across the US		Detect Changes in the Ocean and Atmosphere												х	х		Monika Kopacz
Establish new competitive grants program on earth's radiation budget and climate intervention research	Annual number of new research awards to improve climate understanding, prediction, and information.	Drive Innovative Science			0			х	х								Jin Huang
Hold NOAA-DOE Precipitation Processes and Predictability Workshop		Make Forecasts Better				Х	Х										Jin Huang
Convene a Task Force on the topic of climate sensitivity to explore model estimates of climate sensitivity and use model analysis to advance and improve modeling platforms. NOAA will co-lead the Task Force.		Detect Changes in the Ocean and Atmosphere												х	х		Dan Barrie
Organize the fourth Drought Task Force, with NOAA leadership, to serve the science goals of the National Integrated Drought Information System.		Make Forecasts Better												х	х		Dan Barrie
Support 7 observation-modeling collaborations to improve the use of NOAA data in NOAA models		Make Forecasts Better												х	х		Ginny Selz
Complete report on the paleoclimate focus of the program that evaluates last 5 years of COM program's partnership with NESDIS and provides recommendations on areas of opportunity for advancement in future		Drive Innovative Science												х	х		Ginny Selz
Convene Atmospheric Boundary Layer studies principal investigators to ensure that new observational-based datasets, and associated methods are optimal for the NOAA modeling community's use		Detect Changes in the Ocean and Atmosphere												х		The meeting to discuss and optimize datasets and models was deferred to FY22 due to COVID related limitations on travel and on meeting logistics.	Ginny Selz
Support, plan, and execute, in partnership with US CLIVAR, a community-led workshop that focuses on Tropical Pacific observing needs to advance process understanding and representation in coupled models		Make Forecasts Better												х		Postponed indefinitely due to COVID.	Sandy Lucas
Organize and host a series of at least 7 webinars focused on the Years of Maritime Continent Field Campaigns and Modeling Studies.		Drive Innovative Science									Х	х					Sandy Lucas
Increase by 25% the number of educational programs and collaborations with existing educational programs that support Climate Resilience efforts in their communities.														х	х		Frank Niepold

FY21 CPO Annual Operating Plan Milestones																	
			Mapp	ing							Cu	rrent Year R	eporting				
	What performance measure					FY-2	1 Q1			FY-21 Q2			FY-21 Q3			FY-21 Q4	
Milestone	does this contribute to, if any?	OAR Strategic Goals	NOAA level AOP	O&M action	Lab / Program Review action	Target	Actual	Target	Actual	Why was the target missed? When will the target be completed? What is the risk of missing the target?	Target	Actual	Why was the target missed? When will the target be completed? What is the risk of missing the target?	Target	Actual	Why was the target missed? When will the target be completed? What is the risk of missing the target?	Point of Contact
Update Climate Explorer with the following new or redesigned features: (1) Add charts for Hawai'i and Island territories so the tool will cover the entire United States.	Increase Climate.gov content views by 5% over previous year																
(2) Integrate a new charting package (Plot.ly) to provide interpretive annotations on graphs and maps.(3) Enhance capabilities for users to define & monitor temperature and precipitation thresholds.					0									x	х		David Herring
(4) Add links to at least 4 partner resources to encourage users to use CE information in vulnerability assessments.																	
Produce and distribute a white paper on aligning federal agencies' programs with the "Steps to Resilience" of the U.S. Climate Resilience Toolkit.	Increase Climate.gov content views by 5% over previous year										х	х					David Herring
Develop and launch a climate action plan for the region surrounding Chicago in collaboration with the Metropolitan Mayors Caucus.														х	х		David Herring
Recompetition and Expansion of RISA network														х	Х		Claudia Nierenberg
Complete white paper towards a NOAA national capability for coastal flooding and Inundation information services at climate timescales (supports CI Risk Area)		Detect Changes in the Ocean and Atmosphere												х	х		Paul Hirschberg
Run community science UHI field campaigns in new cities		Detect Changes in the Ocean and Atmosphere												х	х		Juli Trtanj
Hold NIHHIS National Meeting and/or GHHIN Forum (likely a joint event)														х		Postponed indefinitely due to COVID	Juli Trtanj
Hold NOAA One Health workshop to engage partners, WRN and other stakeholders in understanding NOAA capacity and refining future engagements														х		Postponed indefinitely due to COVID	Juli Trtanj
Work with GLISA to plan and implement regional scale modeling workshop		Detect Changes in the Ocean and Atmosphere												х	х		Nancy Beller-Simms
Plan and execute urban climate and health pilot projects in cities with partner organizations														х	х		Hunter Jones
Develop EOI and NOFO for FY22 new competition for urban climate laboratories		Make Forecasts Better									х	х					Hunter Jones
Conduct a workshop with NOAA's Climate Program Office (CPO) to identify areas of cooperation on climate science and tools between ONMS, OAR, and other NOAA labs and programs that produce climate research and tools relevant to sanctuaries (Shared with NOS/Sanctuaries)		Detect Changes in the Ocean and Atmosphere						х	х								Dan Barrie
Assess feasibility and value of a funding opportunity for Sanctuaries-relevant research.	Annual number of new research awards to improve climate understanding, prediction, and information.										х	х					Dan Barrie
Hold workshop to share current research on sea level rise and coastal inundation and discuss opportunities to support Coastal Inundation White Paper		Drive Innovative Science						х		Workshop was not held due to COVID and because of the departure of the CPO lead, Adrienne Antoine. A new lead is now in place (Sandy Lucas). Discussions with NOS to advance Coastal Inundation are continuing. The workshop will be planned for FY22 but significant development will occur by Q4 FY21.							Sandy Lucas
Convene a series (1-3) of listening sessions with key NOAA and external partners in the community, as a first step in the development of a strategic		Drive Innovative Science				Х	1			development will occur by Q4 F121.	х	х					Adrienne Antoine
roadmap for the Adaptation Science Program																	

FY21 CPO Annual Operati	ilg Fiall Wiedsures																				الجيد	الليم		
Performance Measure	Description	Mapping					Past Year Actuals		als	Current Year Reporting Future Annual Targets														
		DOC SP	NOAA AOP	APPR	cı	OAR Strategic Goal		FY-19 F		FY-21 Q arget A		FY-21 Target	. Q2 Actual	Target	Actual	FY-21 Q3 Why was the target missed? When will the target be completed? What is the risk of missing the target?	Target	Actual	FY-21 Q4 Why was the target missed? When will the target be completed? What is the risk of missing the target?				-25 FY-2	Point of Contact
Annual number of Climate Program Office- supported peer-reviewed publications advancing climate understanding, predictions, and delivery of information to communities.	The annual number of peer reviewed publications is an indicator of productivity and relevance and is tracked using online resources. Peer review is one of the important procedures used to ensure that the quality of published information meets the standards of the scientific and technical community.			✓	Z											What is the risk of missing the target.	500	533	which is the lask of massing the target.	500	500	500 5	00 500	Neil Christerson
R2A Index: Annual number of advances in climate and weather research and information products transitioned to a new stage (development, demonstration, or application) to improve earth system understanding and provide information to private and public sectors.	CPO supports research and development projects within NOAA and with external partners to be transitioned to operations and applications to advance NOAA's mission areas and reduce adverse effects of environmental events on people and property.	S	V	✓	✓												5	5		5	5	5	5 5	Neil Christerson
Number of states, and territories working with the National Integrated Drought Information System (NIDIS) to incorporate drought early warning information into their plans	The performance measure is based on the number of states and territories that partner with NIDIS to incorporate drought early warning information into their drought planning activities. Activities that count toward this measure include: local or regional drought planning/management groups; use of tailored information from the U.S. Drought Portal to establish drought indicators and set management triggers in state and territory drought adaptation and mitigation plans; and incorporation of information from basin-specific drought monitors developed through the drought early warning information systems into either state and territory drought adaptation and mitigation plans or as part of state and territory drought planning and management groups.																42	43		42	42	42 4	12 42	Veva Deheza
Increase Climate.gov content views by 5% over previous year	We will aggregate the number of times Climate.gov-produced content is viewed across all our publicly accessible platforms to produce an aggregate metric of monthly views each quarter. In addition to individual page views on Climate.gov web pages, we will also count page views of "spin-off" products such as CLEAN, Climate Explorer, Esri Story Maps, and newsletters. We will also count Social Media Views (Twitter, Facebook, Instagram) and the number of visits to Wikipedia pages where we have placed Climate.gov visualizations.																5%	46%		5%	5%	5% 5	5% 5%	David Herring
Annual number of new research awards to improve climate understanding, prediction, and information.	CPO's external grant programs, including funding opportunities address key information needs related to climate research, modeling, and the impacts of climate change on communities, infrastructure, and economies.																50	79		50	50	50 5	50 50	Neil Christerson
Number of assessment reports or integrated plans developed or implemented across NOAA programs. (e.g. NCA, Arctic Report Card, IPCC, AMAP, SOTC, NIDIS, etc.)	This performance measure shows CPO's major contributions to and completion of assessments and demonstrates the role of formal published climate change assessments in decisions to address climate change impacts . Business, government, and the public use these assessments to improve their climate understanding, decision making and resilience. [Northern Plains Drought Assessment,																4	10		4	4	4	4 4	Ben DeAngelo
Support students at all levels and early career professionals to grow the next generation of scientists	Preparing the next generation of scientists to enter the workforce, either at NOAA or elsewhere in the field, is one of NOAA's most critical, but rewarding endeavors. CPO willl contribute to this effort by supporting post-secondary education students through programs such as the Hollings and EPP scholarships, William Lapenta internships, AMS Fellows, SOARS, etc, and support early career professionals through the Climate and Global Change post doctoral program, Knauss Fellowship. and other opportunities.																20	54		20	20	20	20 20	Wayne Higgins
Fund at least four new projects from FY21 solicitations that directly advance CPO's Risk Area goals (inundation, marine ecosystems, heat, water resources)																	4	4						Dan Barrie
Number of RISA-informed plans and policies																	11		Need to verify after 10/11 when S. Bath returns	11	11	11 1	11 11	Sean Bath