

## Appendix I. Field Services Implementation

River and flood forecasts are now provided for approximately 3,550 locations. Of these locations, both graphical hydrographs and appropriate probabilistic forecast information are available at approximately 1360 locations.

AHPS models will be calibrated when implementing services. In addition, new models (new science) will be implemented for AHPS forecast locations, where appropriate and when verified for NWS operations. This approach extends AHPS benefits to new areas while promoting simultaneous implementation of the advanced AHPS services and minimizes delay to help emergency managers save lives and property. The strategy also enables the deployment of enhanced services during the life of the program.

**Goal:** Deliver new river, flood and drought forecast information through the infusion of new science and technology. This information is provided to National Weather Service (NWS) customers as web-based forecast information from minutes to days to months. The web-based information contains displays for the magnitude and certainty of occurrence of water quantities ranging from floods to droughts. The NWS will provide Advanced Hydrologic Prediction Service (AHPS) forecast information throughout the Nation at 4,011 locations by 2013.

**Performance Gap:** The National Oceanic and Atmospheric Administration's Hydrology Program meets the basic hydrologic service needs of its customers and partners. River and flood forecasts and outlook information are now provided for approximately 3,550 locations. Of these locations, AHPS information was available at 1360 locations by the end of FY 2006. The increase in number of forecast locations from 3,550 to 4,011 with AHPS information may be provided through new calibrations or distributed modeling capabilities.

**Schedule:** AHPS will be deployed using the following schedule. The schedule considers the AHPS goal and the availability of new (verified) science.

			Table 1. AHPS Operational Forecast Locations														
Base	New Service Locations	Total	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	Total

**Alaska Pacific Region**

APRFC	103				1	6	8	12	12	12	14	14	14	10			103
		19	122											4	15		19

**Western Region**

CBRFC	262				20	28	29	29	29	29	29	29	30	10			262
		48	310											19	29		48
CNRFC	184				13	17	20	21	21	21	21	21	21	8			184
		34	218											13	21		34
NWRFC	404				12	16	50	50	50	50	50	50	50	26			404
		75	479											24	51		75

**Southern Region**

ABRFC	268				7	20	51	34	34	34	34	34	20				268
		49	317											16	16	17	49
LMRFC	207					25	27	27	27	27	28	28	18				207
		38	245										10	14	14		38
SERFC	217				3	10	34	26	26	26	26	26	14				217
		40	257										13	13	14		40
WGRFC	314					33	37	37	37	38	38	38	38	18			314
		58	372										19	19	20		58

**AHPS Operational Forecast Locations (continued)**

	Base	New Service Locations	Total	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	Total
<b>Central Region</b>																		
MBRFC	505					45	26	28	55	55	55	55	55	56	56	19		505
		93	598										18	18	19	19	19	93
NCRFC	366			27	79	72	112	44	32									366
		67	433										13	13	13	13	15	67
<b>Eastern Region</b>																		
MARFC	171					3	60	59	20	20	9							171
		31	202										6	6	6	6	7	31
NERFC	130					14	20	33	17	17	17	12						130
		24	154											6	6	6	6	24
OHRFC	257				56	45	72	45	28	11								257
		47	304										9	9	9	10	10	47
<b>Total</b>	<b>3,388</b>	<b>623</b>	<b>4,011</b>	<b>27</b>	<b>135</b>	<b>189</b>	<b>366</b>	<b>419</b>	<b>383</b>	<b>339</b>	<b>317</b>	<b>304</b>	<b>341</b>	<b>334</b>	<b>352</b>	<b>267</b>	<b>238</b>	<b>4,011</b>
<b>Cumulative Forecast Locations</b>					162	351	717	1,136	1,519	1,858	2,175	2,479	2,820	3,154	3,506	3,773	4,011	

## Appendix II. 2006 AHPS Status Maps

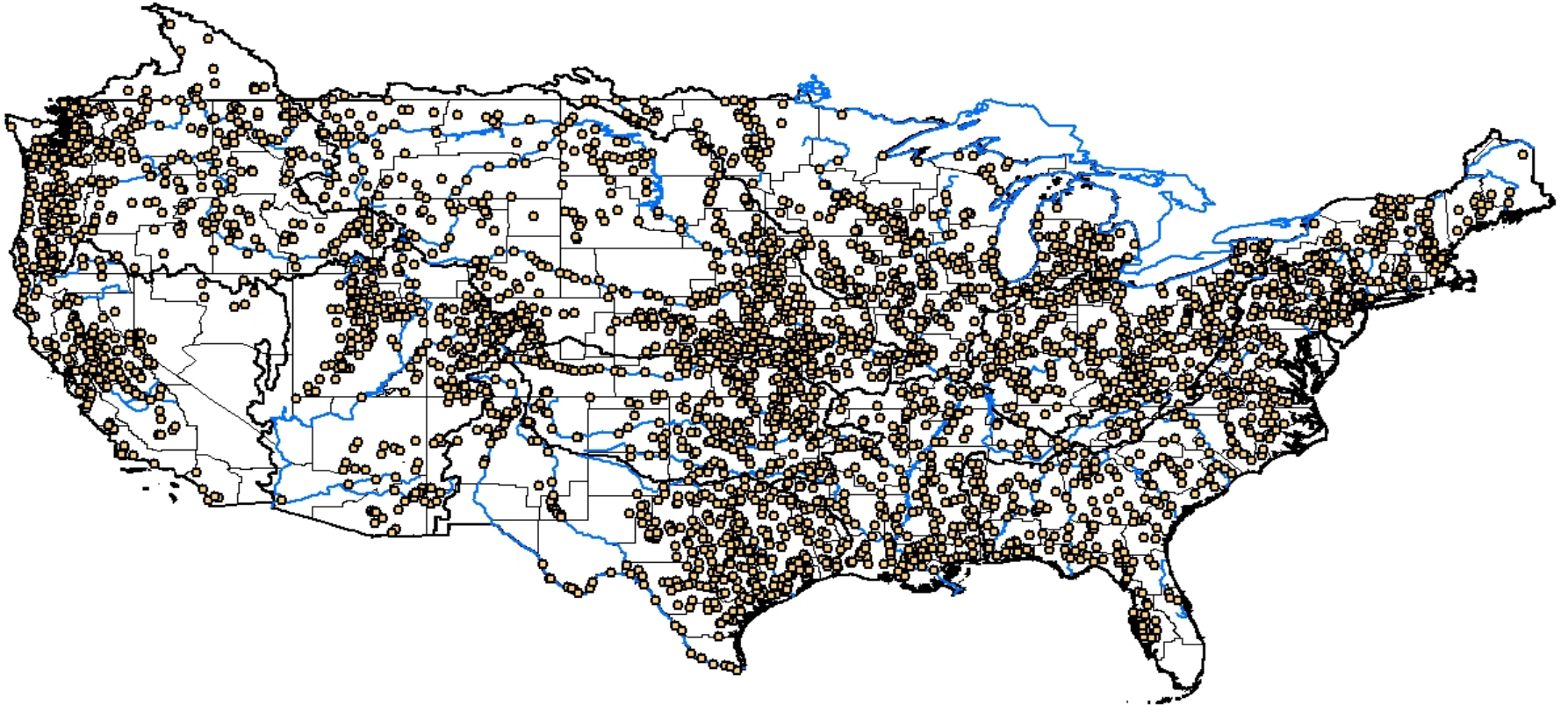


Figure 1: Current NWS Forecast Points

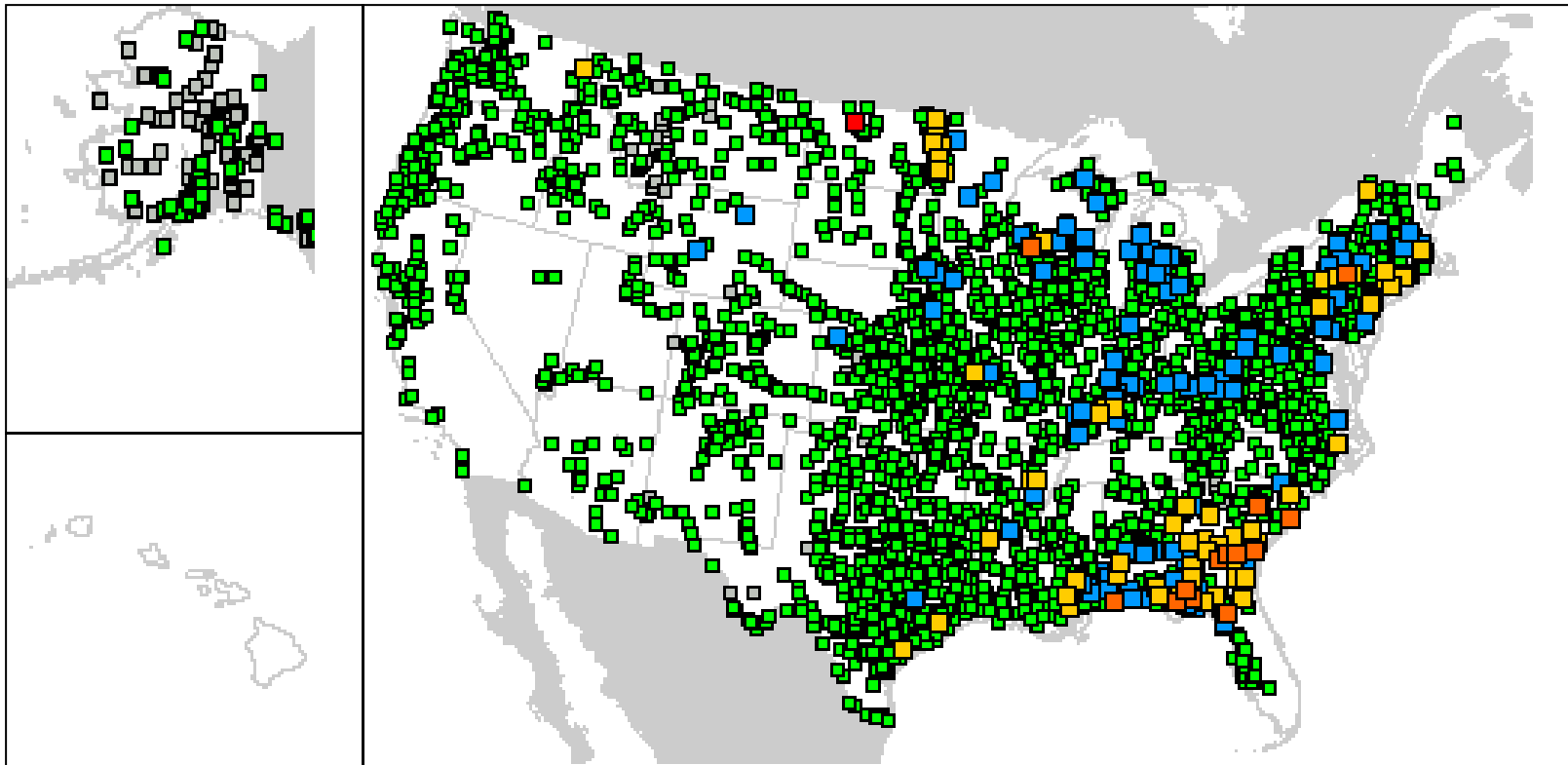


Figure 2: Current locations providing graphical hydrographs.

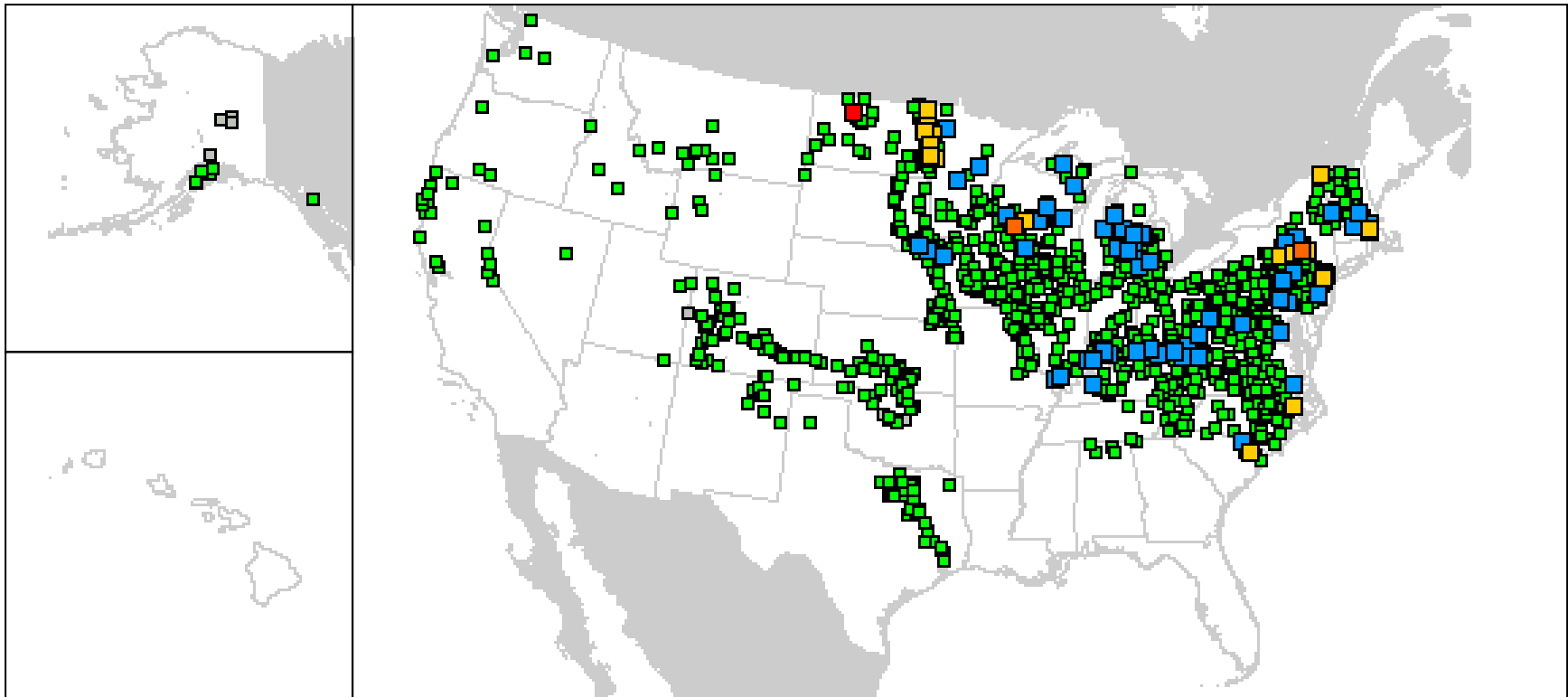


Figure 3: Current locations providing graphical hydrographs and long term probabilistic forecasts

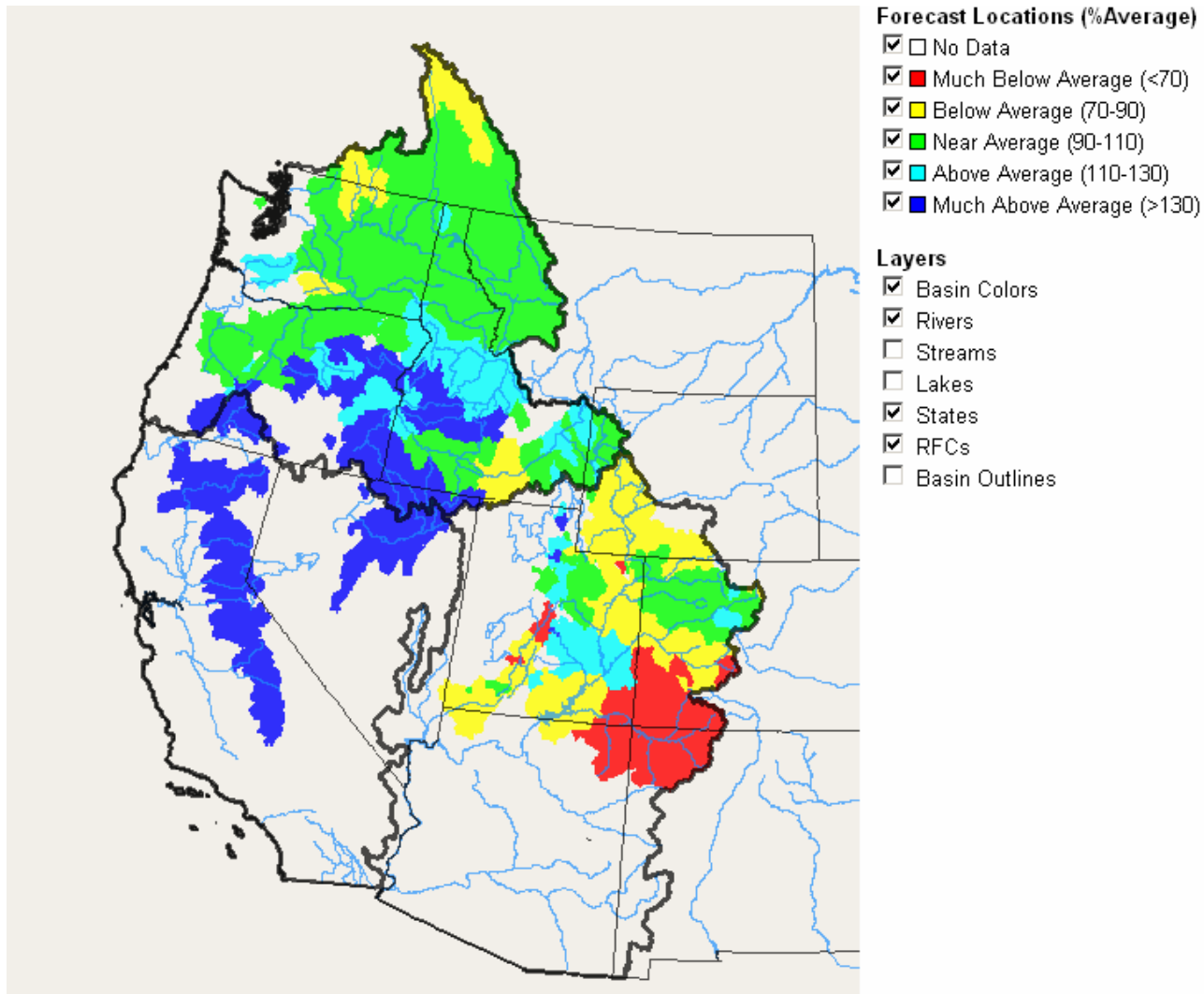


Figure 4: Current locations providing graphical water supply volume forecasts.

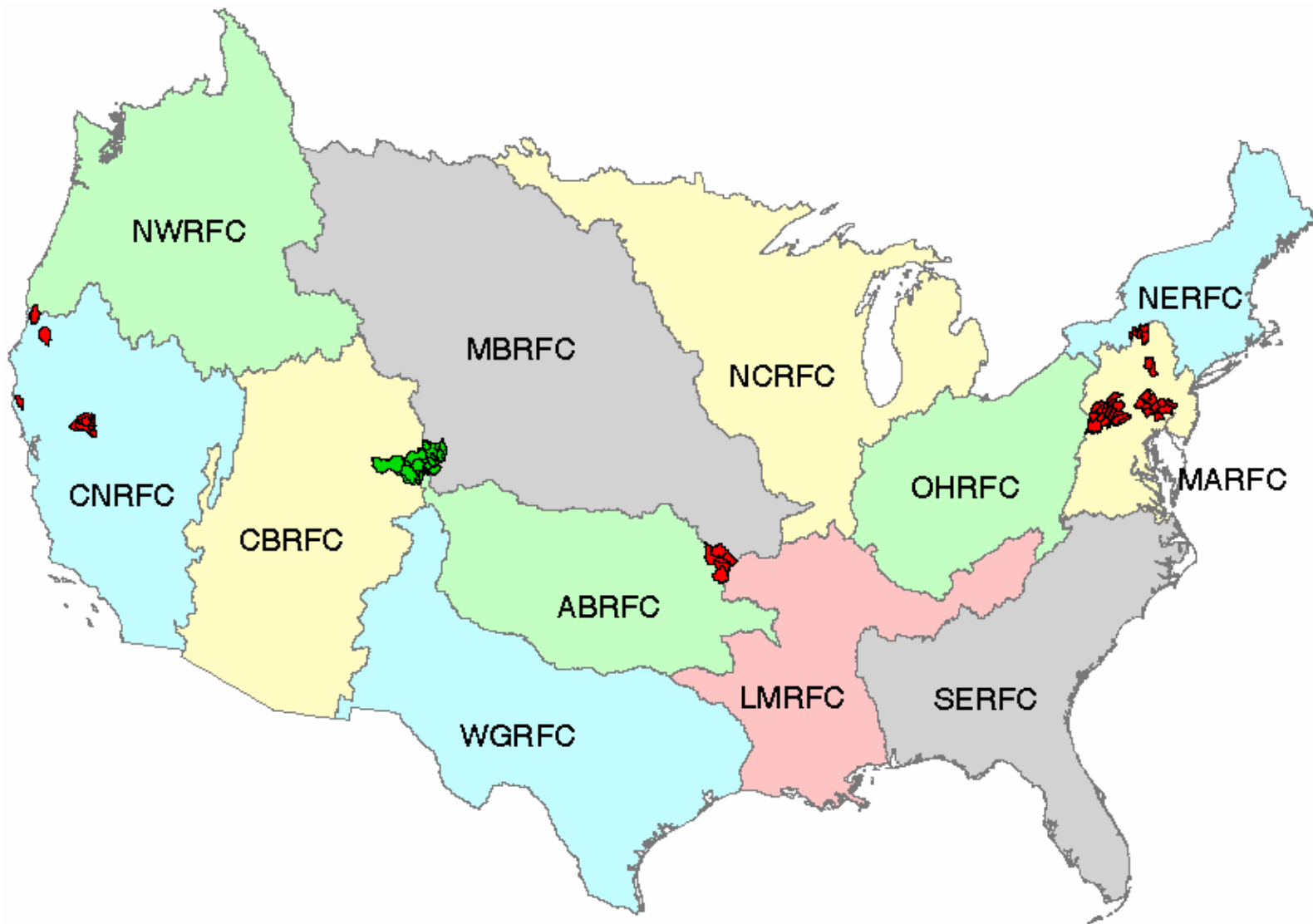


Figure 5: Current locations with Short- to Long-Term Probabilistic Forecast Services



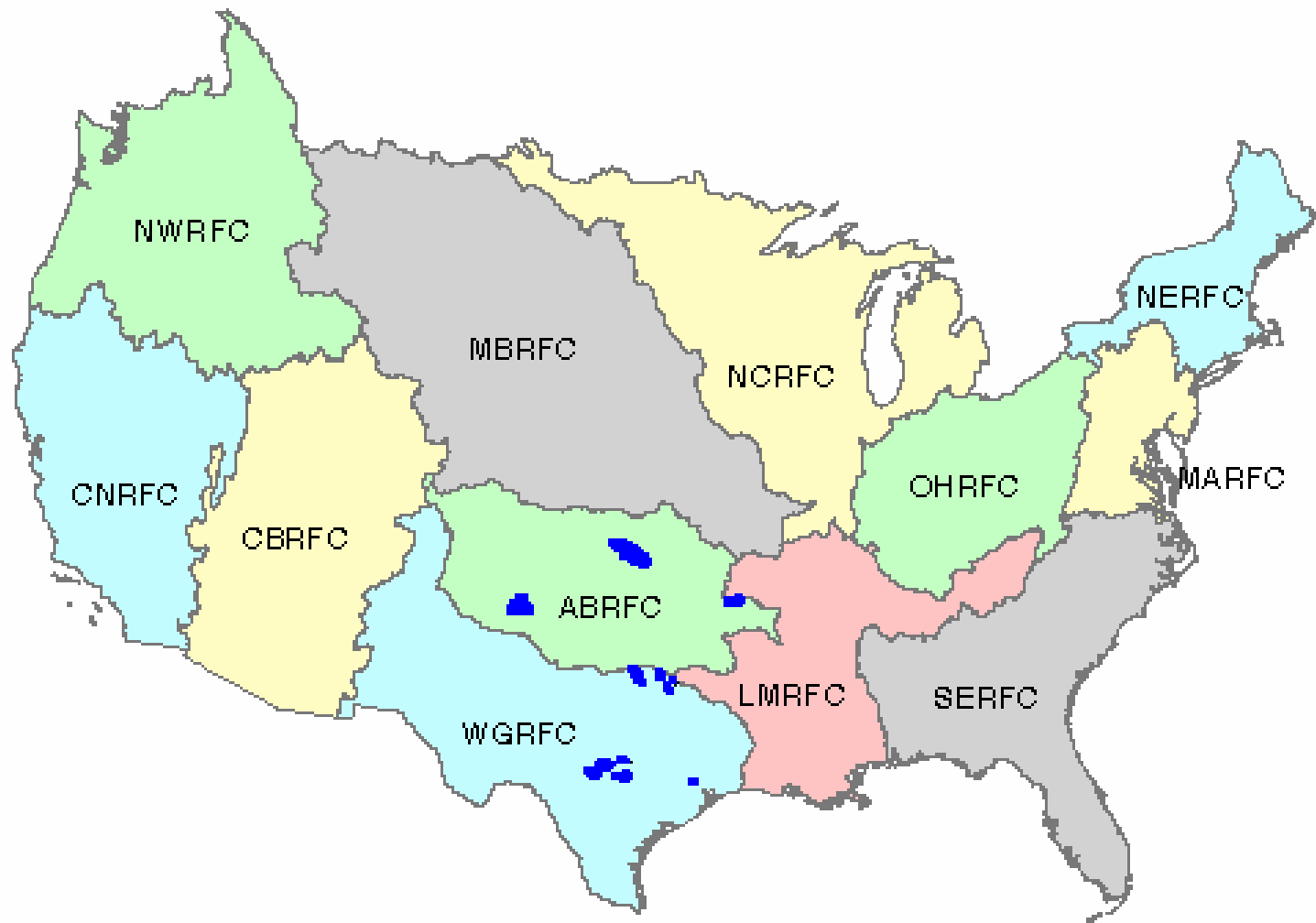
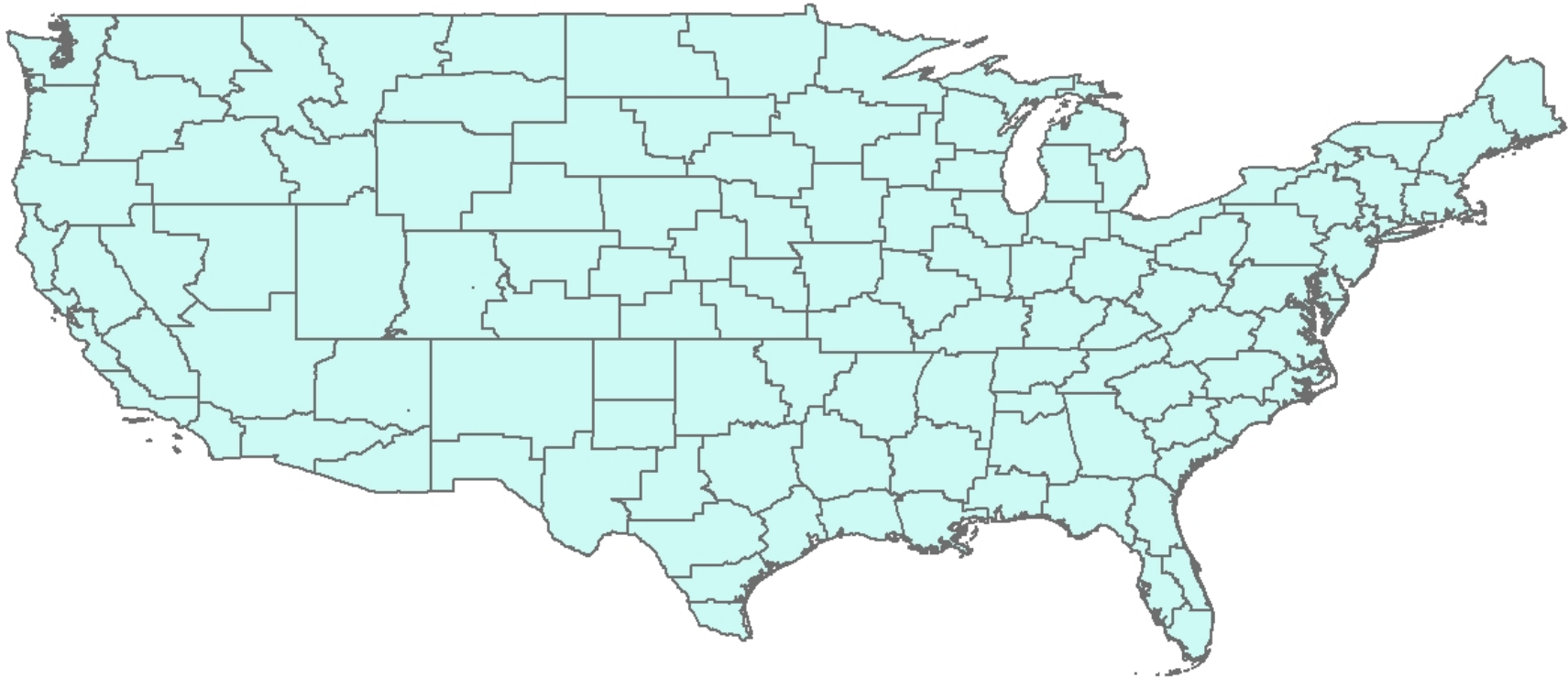
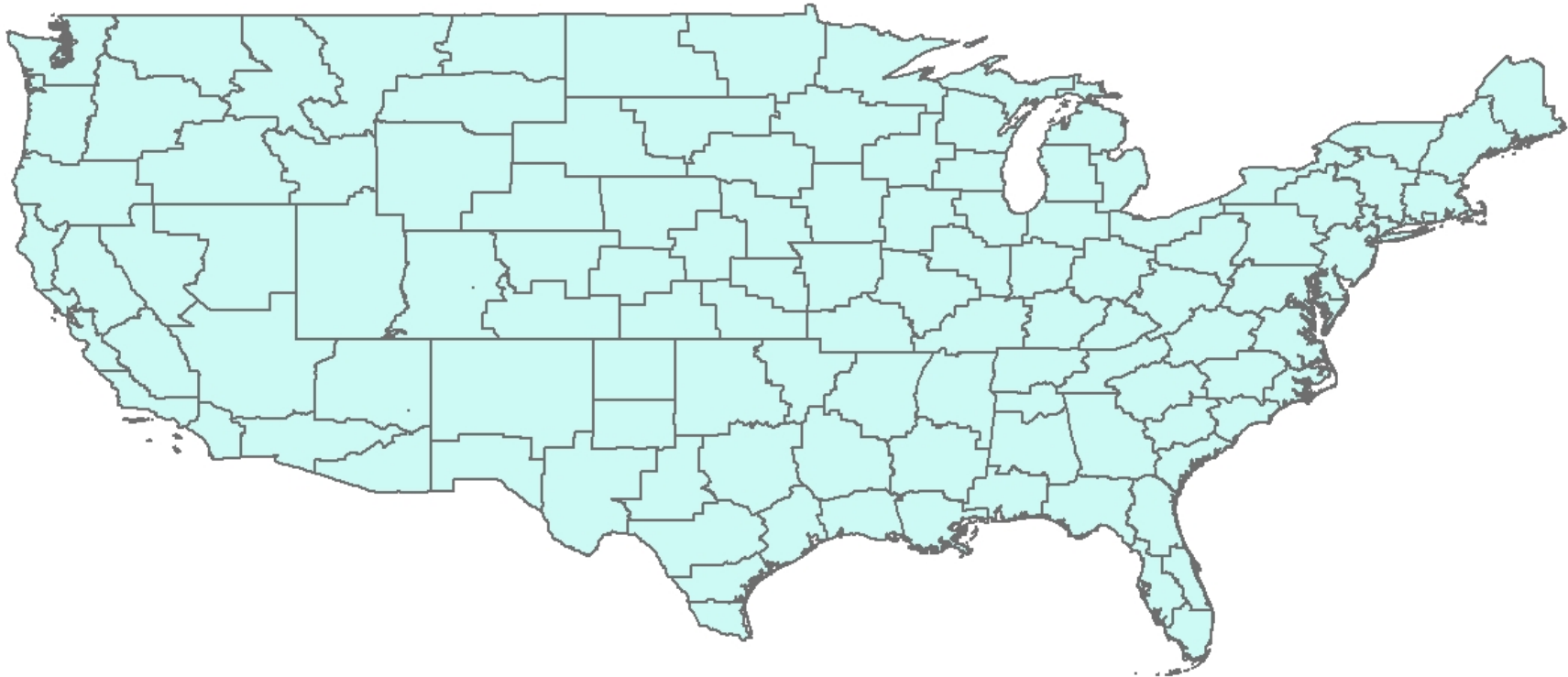


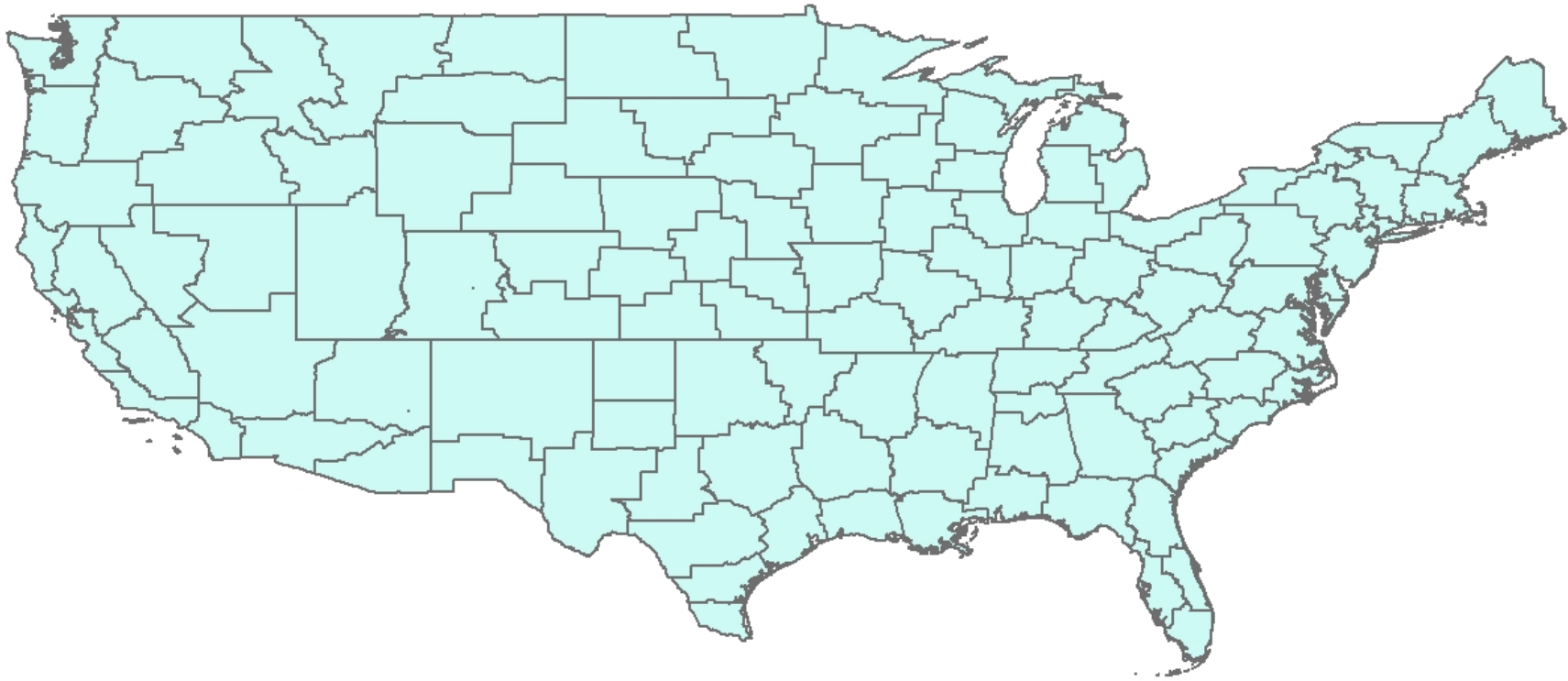
Figure 6: Current forecast locations with Short- to Long-Term Distributed Modeling Forecast Services



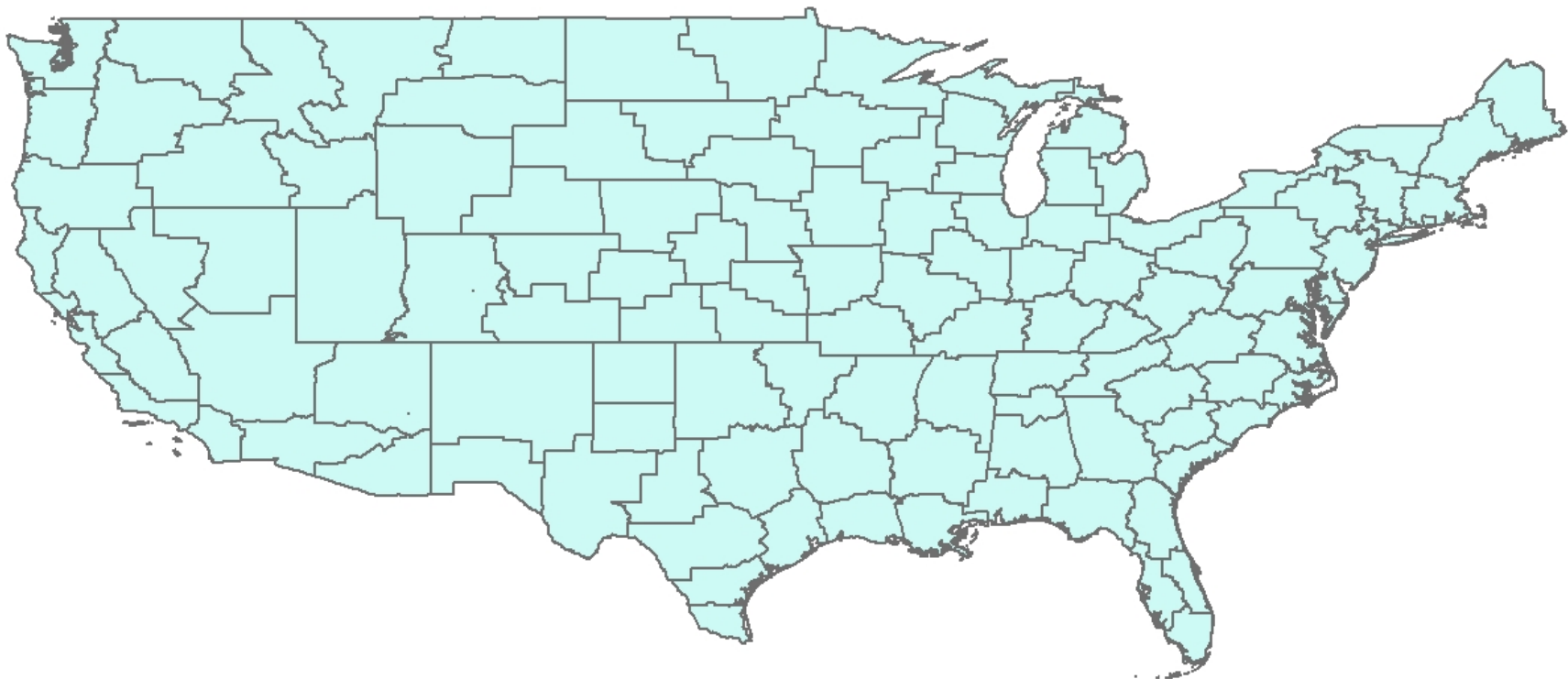
**Figure 7: Current basin areas with Flash Flood Services analyzed with the FFMP tool. (needs to be updated)**



**Figure 8: Current basin locations with Flash Flood Services analyzed with the Site Specific Tool (needs to be updated)**



**Figure 9: Current basin areas with Flash Flood Services with the relative FFPI tool. (needs to be updated)**



**Figure 10: Current basin areas with Flash Flood Services with the Statistical Distributed Model tool. (needs to be updated)**



Figure 11: Current locations with real time maps generated from a dynamic hydraulic model.