TIMELINE OF REQUIRED SPECIES PROTECTION DECISIONS

2011 Initial Decision: Florida sandhill crane, MacGillivray's seaside sparrow, Eastern black rail, Alabama map turtle, Oklahoma salamander, Barbour's map turtle, Escambia map turtle, West Virginia Spring Salamander, Tennessee cave salamander, Black warrior waterdog, Cape Sable orchid, Clam-shell orchid, Florida bog frog, Lower Florida Keys striped mud turtle, Streamside salamander, Chamberlain's dwarf salamander, Cobblestone tiger beetle, Carolina pygmy sunfish, Tippecanoe darter, Eastern hellbender, Acute elimia, Alabama Cave Crayfish, Alabama Hickorynut, Alabama Rainbow, Alabama Spike, Alachua Light Fleeing Cave Crayfish, Altamaha Arcmussel, Altamaha Shiner, Amargosa Tryonia, Ample Elimia, Angular Dwarf Crayfish, Apalachicola Floater, Apalachicola Wild Indigo, Appalachian Cave Crayfish, Appalachian Fissidens Moss, Appalachian Snaketail, Arkansas Mudalia, Ash Meadows Pebblesnail, Ashy Darter, Atlantic Pigtoe, Avernus Cave Beetle, Bankhead Darter, Barrens Darter, Barrens Topminnow, Basalt Juga, Bayou Bodcau Crayfish, Bear Tupelo, Bearded Red Crayfish, Beautiful Crayfish, Beaverpond Marstonia, Bifid Duct Pyrg, Big Bar Hesperian, Big Blue Springs Cave Crayfish, Big Cypress Epidendrum, Big Sandy Crayfish, Big South Fork Crayfish, Big Warm Spring Pyrg, Bigcheek Cave Crayfish, Black Creek Crayfish, Black Mudalia, Blackbarred Crayfish, Black-bract Pipewort, Blackfin Sucker, Black-knobbed Map Turtle, Blood River Crayfish, Blue Point Pyrg, Blue Spring Hydrobe Snail, Bluehead Shiner, Blueridge Springfly, Bluestripe Shiner, Bog Spicebush, Boykin's Lobelia, Brawleys Fork Crayfish, Bridled Darter, Broad River Burrowing Crayfish, Broad River Spiney Crayfish, Broadstripe Shiner, Brook Floater, Brother Spike, Bryson's Sedge, Burrington Jumping-slug, Burrowing Bog Crayfish, Butterfield Pyrg, Caddo Madtom, Caddisfly (Agarodes logani), Calcasieu Crayfish, Calvert's Emerald, Camp Valley Pyrg, Canary Duskysnail, Candy Darter, Canoe Creek Pigtoe, Cape Fear Spatterdock, Caper Elimia, Carolina Birds-in-a-nest, Carolina Bishopweed, Carolina Hemlock, Carolina Madtom, Cave obligate isopod (Caecidotea cannula), Chattooga River Crayfish, Chauga Crayfish, Chelan Mountainsnail, Cherokee Clubtail, Chesapeake logperch, Chickamauga Crayfish, Choctaw Bean, Chowanoke Crayfish, Ciliate-leaf Tickseed, Cinnamon Juga, Clifton Spring Hydrobe Snail, Coal Darter, Coastal Flatwoods Crayfish, Coastal Lowland Cave Crayfish, Cobble Elimia, Cockle Elimia, Coldwater Crayfish, Coleman Cave Beetle, Columbia Duskysnail, Columbia Oregonian, Compact Elimia, Conasauga Blue Burrower, Cooper's Cave Amphipod, Coosa Creekshell, Coosawattae Crayfish, Corn Creek Pyrg, Corpulent Hornsnail, Correll's False Dragon-head, Crater Lake Tightcoil, Crested Riverlet Crayfish, Crossroads Cave Beetle, Crystal Darter, Crystal Springsnail, Cumberland Dusky Salamander, Cumberland Gap Cave Beetle, Cumberland Moccasinshell, Curtis' Loosestrife. Cylinder Elimia, Cypress Crayfish, Dalles Sideband, Delicate Spike, Dense Hydrobe Snail, Diminuitive Pebblesnail, Disjunct Pebblesnail, Distal Gland

Springsnail, Doll's-daisy, Domed Ancylid, Dougherty Plain Cave Crayfish, Dry Fork Valley Cave Beetle, Duckwater Pyrg, Duckwater Warm Springs Pyrg, Dukes' Skipper, Eared Coneflower, Eastern Ribbonsnake - Lower Florida Keys, Edison's Ascyrum, Edmund's Snaketail, Egg-mimic Darter, Elegant Elimia, Elk River Crayfish, Elliott's Croton, Elongate Gland Springsnail, Emigrant Pyrg, Engraved Elimia, Enterprise Siltsnail, Etowah Cravfish, Evening Fieldslug, Fairbanks Springsnail, Flag Pyrg, Flat-top Pebblesnail, Flat-topped Steptoe Pyrg, Florida Brown Checkered Summer Sedge, Florida Cave Amphipod, Florida Cave Crayfish, Florida Cave Crayfish, Florida Fairy Shrimp, Florida Keys Mole Skink, Florida Pondweed, Florida Red-bellied Turtle - Florida Panhandle, Florida Willow, Frecklebelly Madtom, Freemouth Hydrobe Snail, Fuzzy Pigtoe, Georgia Blind Salamander, Georgia Leadplant, Globular Pebblesnail, Godfrey's Privet, Godfrey's Stitchwort, Gorge Leafy Liverwort, Grandfather Mountain Crayfish. Grated Tryonia, Green Floater, Greenbrier Cave Crayfish, Greensboro Burrowing Crayfish, Gulf Hammock Dwarf Siren, Gulf Sweet Pitcherplant, Hairy-peduncled Beakrush, Halloween Darter, Hall's Bulrush, Hall's Pocket Moss, Hamlin Valley Pyrg, Hardin Crayfish, Hardy Pyrg, Harper's Fimbristylis, Harper's Heartleaf, Hartwrightia, Hatchie Burrowing Crayfish, Helmet Rocksnail, Henry's Spider-lily, Hiwassee Headwater Crayfish, Hobb's Cave Amphipod, Hoko Vertigo, Holiday Darter, Hornwort (Megaceros aenigmaticus), Hubbard's Cave Beetle, Hubbs Pyrg, Hubricht's Cave Beetle, Ichetucknee Siltsnail, Impressed-nerved Sedge, Inflated Floater, Inflated Spike, Insular Cotton Rat, Irons Fork Burrowing Crayfish, Jackson Prairie Crayfish, Jefferson County Crayfish, Karst Snowfly, Kentucky Creekshell, Kirtland's Snake, Kisatchie Painted Crayfish, Knobby Rams-horn, Knobby Rocksnail, Kral's Yellow-eyed-grass, Lagniappe Crayfish, Lake Valley Pyrg, Landyes Pyrg, Large-flowered Barbara's-buttons, Laurel Dace, Lean Crayfish, Lea's Bog Lichen, Least Crayfish, Lilyshoals Elimia, Linda's Roadsideskipper, Little Kennedy Cave Beetle, Little Oecetis Longhorn Caddisfly, Little Tennessee Crayfish, Lobed Barren-strawberry, Lobed Roachfly, Lockes Pyrg, Long Beach Seedbox, Longhead Darter, Longitudinal Gland Pyrg, Longnose Darter, Longsolid, Lost Creek Pebblesnail, Louisiana Eyed Silkmoth, Louisiana Needlefly, Lowland Loosestrife, Maddens Cave Beetle, Magnificent Rams-horn, Maiden Spring Cave Beetle, Mammoth Spring Crayfish, Manitou Cavesnail, Masked Duskysnail, Meadow Joint-vetch, Median Gland Nevada Pyrg, Miami Cave Crayfish, Mimic Crayfish, Minute Cave Amphipod, Minute Tryonia, Mississippi Flatwoods Crayfish, Moapa Pebblesnail, Moapa Valley Pyrg, Morrison's Cave Amphipod, Morse's Little Plain Brown Sedge, Mountain River Cruiser, Mud Elimia, Narrow Pigtoe, Narrowleaf Carolina Scalystem, Narrowleaf Naiad, Natural Bridge Cave Beetle, Nerite Pebblesnail, Neritiform Steptoe Ranch Pyrg, Neuse River Waterdog, New River Crayfish, New River Valley Cave Beetle, Newberry Burrowing Crayfish, No common name, No common name, Nodulose Coosa River Snail, Northern Cavefish, Northern Red-bellied Cooter, Northern Steptoe Pyrg, Nugget Pebblesnail, Obey Crayfish, Ocala Vetch,

Ocmulgee Marstonia, Ocmulgee Skullcap, Oktibbeha Riverlet Crayfish, One-toed Amphiuma, Orange Lake Cave Crayfish, Orangefin Madtom, Orlando Cave Crayfish, Ouachita Burrowing Crayfish, Ouachita Creekshell, Ouachita Madtom, Overlooked Cave Beetle, Ozark Chub, Ozark Emerald, Ozark Pyrg, Ozark Shiner, Pahranagat Pebblesnail, Palatka Skipper, Paleback Darter, Pallid Cave Cravfish, Panama City Cravfish, Panhandle Lily, Panhandle Meadow-beauty, Pascagoula Map Turtle, Patch-nosed Salamander, Peppered Shiner, Piebald Madtom, Piedmont Blue Burrower, Pine Island Oryzomys, Point of Rocks Tryonia, Ponderous Siltsnail, Popeye Shiner, Potem Pebblesnail, Princess Elimia, Pristine Cravfish, Prune Elimia, Puget Oregonian, Purple Balduina, Purple Lilliput, Purple Skimmer, Putnum County Cave Crayfish, Pygmy Siltsnail, Pyramid Pigtoe, Rabbitsfoot, Rare Skipper, Raven's Seedbox, Rayed Bean, Rayed Creekshell, Regal Burrowing Crayfish, Reverse Pebblesnail, Rivergrass, Robust Redhorse, Rockcastle Wood-Aster, Rocky Shiner, Rogue Creek Hydroptila Caddisfly, Rough-stemmed Aster, Round Ebonyshell, Round Hickorynut, Round-rib Elimia, Rye Cove Isopod, Saddled Madtom, Saint Paul Cave Beetle, Salamander Mussel, Saline Burrowing Crayfish, Sanibel Island Oryzomys, Santa Fe Cave Crayfish, Sarah's Hydroptila Caddisfly, Savannah Lilliput, Say's Spiketail, Seaside Alder, Seepage Salamander, Septima's Clubtail, Setose Cream and Brown Mottled Microcaddisfly, Sevier Snowfly, Sharp's Leafy Liverwort, Shasta Chaparral, Shasta Hesperian, Shasta Sideband, Shasta Springs Pebblesnail, Shawnee Darter, Sheepnose, Shelta Cave Crayfish, Sherman's Short-tailed Shrew, Shinner's Sunflower, Shortspire Hornsnail, Shutispear Crayfish, Sickle Darter, Sicklefin Redhorse, Silken Cave Beetle, Silver Glen Springs Crayfish, Siskiyou Sideband, Skirted Hornsnail, Slenderclaw Crayfish, Slenderwrist Burrowing Crayfish, Small-flower Meadow-beauty, Smallheaded Pipewort, Smallscale Darter, Smokies Needlefly, Smokies Snowfly, Smooth Mudalia, Smooth-barked St. John's-wort, Snuffbox, South Branch Valley Cave Beetle, South Florida Rainbow Snake, Southeast Nevada Pyrg, Southern Duckwater Pyrg, Southern Elktoe, Southern Kidneyshell, Southern Lance, Southern Meadowrue, Southern Racemose Goldenrod, Southern Sandshell, Southern Snaketail, Southern Steptoe Pyrg, Spathulate Seedbox, Speckled Burrowing Crayfish, Spectaclecase, Spider Cave Crayfish, Spider Elimia, Spiny Riversnail, Spiny Scale Crayfish, Spinytail Crayfish, Sportinggoods Tryonia, Spotted Darter, Spotted Rocksnail, Spring Mountains Pyrg, St. John's Elephantear, Sterile Basin Pyrg, Striated Darter, Sub-globose Snake Pyrg, Subglobose Steptoe Ranch Pyrg, Sucarnoochee River Crayfish, Sun-facing Coneflower, Suwannee Moccasinshell, Swamp Buckthorn, Sykora's Hydroptila Caddisfly, Tall Pebblesnail, Tallapoosa Orb, Tapered Pigtoe, Tehamana Chaparral, Tennessee Cave Crayfish, Tennessee Clubshell, Tennessee Clubtail, Tennessee Forestfly, Tennessee Heelsplitter, Tennessee Pigtoe, Tennessee Pondweed, Texas Emerald, Texas Screwstem, Texas Trillium, Thin-wall Quillwort, Thomas' Cave Beetle, Thorne's Beakrush, Three-tooth Triaenodes

Caddisfly, Tidewater Amphipod, Tombigbee Riverlet Crayfish, Trispot Darter, Tuscumbia Darter, Umbilicate Pebblesnail, Variable-leaved Indian-plantain, Virginia Stone, Waccamaw Fatmucket, Walnut Elimia, Warrior Darter, Warrior Pigtoe, Water Stitchwort, Wekiwa Hydrobe Snail, Wekiwa Siltsnail, West Florida Cow-lily, Western Chicken Turtle, Western Fanshell, Westfall's Clubtail, West's Flax, Wherry's Sweet Pitcherplant, White River Valley Pyrg, Winter Quillwort, Wintu Sideband, Wire-leaved Dropseed, Woodville Karst Cave Crayfish, Yadkin River Goldenrod, Yalobusha Riverlet Crayfish, Yazoo Crayfish, Yellow Anisetree, Yellow Lance, Yellow-sided Clubtail.

Listing Proposal: California golden trout, Lake Sammamish kokanee salmon, Black-footed albatross, Cactus ferruginous pygmy owl, Western gull-billed tern, Dusky tree vole, Alabama pearlshell, Choctaw bean, Coquí llanero, Fuzzy pigtoe, Mohave ground squirrel, Mojave fringe-toed lizard, Narrow pigtoe, Oklahoma grass pink, Ozark chinquapin, Round ebonyshell, San Bernadino springsnail, Southern kidneyshell, Southern sandshell, Tapered pigtoe, Tehachapi slender salamander, Three Forks springsnail, 23 species from Oahu.

Final Decision: Ozark hellbender, Rush darter, Yellowcheek darter, Casey's june beetle, Altamaha spinymussel, Chucky madtom, Cumberland darter, DeBeque phacelia, Laurel dace, Pagosa skyrocket, Parachute penstemon.

2012 Initial Decision: Scarlet Hawiian honeycreeper ('l'iwi), San Bernardino flying squirrel, White-tailed ptarmigan, Bartram stonecrop, Beardless Chinch Weed, Bicknell's thrush, Sonoran talussnail.

Listing Proposal: Mexican gray wolf, Gunnison sage grouse, Spring pygmy sunfish, Streaked horned lark, Jemez Mountain salamander, Jollyville Plateau salamander, Miami blue butterfly, Austin blind salamander, Coral Pink Sand Dunes tiger beetle, Florida semaphore cactus, Georgetown salamander, Hat Creek pebblesnail, Aboriginal prickly-apple, Acuna cactus, Basalt juga, Big Warm Spring Pyrg, Brush prairie pocket gopher, Canary duskysnail, Cape Sable thoroughwort, Cinnamon juga, Columbia Duskysnail, Diamond darter, Diamond Y spring snail, Diminutive amphipod, Diminuitive pebblesnail, Duckwater Pyrg, Duckwater Warm Springs Pyrg, Fickeisen plains, Florida bonneted bat, Fluted kidneyshell, Gierisch mallow, Gonzales springsnail, Goose Valley pebblesnail, Grotto sculpin, Knobby Ramshorn, Lemmon's fleabane, Lesser prarie-chicken, Lockes Pyrg, Mardon skipper butterfly, Masked duskysnail, Mt. Charleston blue butterfly. Neosho mucket, Nerite pebblesnail, Nugget pebblesnail, Olympia pocket gopher, Olympic pocket gopher, Phantom Lake cave snail, Phantom springsnail, Potem pebblesnail, Rabbitsfoot, Rayed bean, Roy Prairie pocket gopher, Salado salamander, Shasta Springs pebblesnail, Sheepnose mussel, Shelton pocket gopher, Slabside pearlymussel, Southern Duckwater Pyrg, Snuffbox, Spectaclecase pearly mussel, Tacoma pocket gopher, Tall pebblesnail, Taylor'scheckerspot butterfly, Tenino pocket gopher, Umtanum desert-buckwheat, Wekiu bug, White bluffs bladderpod, Yelm pocket gopher, 21

species from the Big Island and 29 species from Maui, Hawaii. **Final Decision (if proposed):** Cactus ferruginous pygmy owl, Alabama pearlshell, Choctaw bean, Fuzzy pigtoe, Narrow pigtoe, Round ebonyshell, San Bernadino springsnail, Southern kidneyshell, Southern sandshell, Tapered pigtoe, Three Forks springsnail, and 23 species from Oahu, Hawaii.

2013 Listing Proposal: American wolverine, Mono Basin sage grouse, Oregon spotted frog, Red knot, Sierra Nevada yellow-legged frog, Western yellow-billed cuckoo, Yosemite toad, Ashy storm petrel, Dakota skipper, Eastern small-footed bat, Kittlitz's murrelet, Mexican garter snake, Northern long-eared bat, Rosemont talussnail.

Final Decision (if proposed): Mexican gray wolf, Miami blue butterfly, Gunnison sage grouse, Jemez Mountain salamander, Austin blind salamander, Georgetown salamander, Spring pygmy sunfish, Streaked horned lark, Florida semaphore cactus, Coral Pink Sand Dunes tiger beetle, Aboriginal prickly-apple, Acuna cactus, Brush prairie pocket gopher, Cape Sable thoroughwort, Diamond darter, Diamond Y spring snail, Diminutive amphipod, Fickeisen plains, Florida bonneted bat, Fluted kidneyshell, Gierisch mallow, Gonzales springsnail, Grotto sculpin, Jollyville Plateau salamander, Lemmon's fleabane, Lesser prariechicken, Mardon skipper butterfly, Mt. Charleston blue butterfly, Neosho mucket, Olympia pocket gopher, Olympic pocket gopher, Phantom Lake cave snail, Phantom springsnail, Rabbitsfoot, Rayed bean, Roy Prairie pocket gopher, Salado salamander, Sheepnose mussel, Shelton pocket gopher, Slabside pearlymussel, Snuffbox, Spectaclecase pearly mussel, Tacoma pocket gopher, Taylor's checkerspot butterfly, Tenino pocket gopher, Umtanum desertbuckwheat, Wekiu bug, White bluffs bladderpod, Yelm pocket gopher, and 21 species from the Big Island and 29 species from Maui, Hawaii.

2014 Listing Proposal: Pacific fisher, Rio Grande cutthroat trout, Yellow-billed loon, Montana grayling, Black pine snake, Least chub, Tucson shovel-nosed snake, and five other candidates.

Final Decision (if proposed): American wolverine, Mono Basin sage grouse, Oregon spotted frog, Red knot, Sierra Nevada yellow-legged frog, Western yellow-billed cuckoo, Yosemite toad Ashy storm petrel, Dakota skipper, Eastern small-footed bat, Kittlitz's murrelet, Mexican garter snake, Northern long-eared bat, Rosemont talussnail.

2015 Listing Proposal: New England cottontail rabbit, Columbia Basin greater sage grouse, Greater sage grouse, Eastern massasauga rattlesnake, Headwater chub, Kentucky arrow darter, Lower Colorado River roundtail chub, Sonoran Desert Tortoise, Southern Idaho ground squirrel, and 35 other candidate species.

Final Decision (if proposed): Pacific fisher, Rio Grande cutthroat trout, Yellow-

billed loon, Montana grayling, Black pine snake, Least chub, Tucson shovelnosed snake and five other candidates.

2016 Listing Proposal: Scarlet Hawaiian honeycreeper (l'iwi), Relict leopard frog, Tahoe yellow cress. **Final Decision (if proposed):** Greater sage grouse, Columbia Basin greater sage grouse, New England cottontail rabbit, Eastern massasauga rattlesnake, Headwater chub, Kentucky arrow Darter, Lower Colorado River roundtail chub, Sonoran desert tortoise, Southern Idaho ground squirrel, and 35 other candidate species.

2017 Listing Proposal: Pacific walrus.

Final Decision (if proposed): Scarlet Hawaiian honeycreeper (l'iwi), Relict leopard frog, Tahoe yellow cress.

2018 Final Decision (if proposed): Pacific walrus.