From: Sheehan, Gregory
To: julia@nfwf.org
Subject: draft
Date: Wednesday, August 8, 2018 10:44:03 AM
Attachments: Sheehan WASDA Remarks 8.8.18 V2 .docx

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draft speaking points

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Greg Sheehan
Principal Deputy Director
US Fish and Wildlife Service
1849 C Street NW, Room 3358
Washington, DC 20240
202-208-4545

U.S. Fish and Wildlife Service Principal Deputy Director Greg Sheehan
Western Association of State Departments of Agriculture
2018 Conference
Salt Lake City, UT
August 8, 2018

- Thank you for the opportunity to speak to you today!

- It's a privilege to be back here in my home state of Utah, among so many colleagues and friends.

- I'd like to thank my longtime friend, Utah Commissioner of Agriculture and Food, LuAnn Adams, for the invitation to speak to you today.

- I know LuAnn and her staff have worked night and day to make this conference a great experience.

- And I also know as the former Utah Division of Wildlife Resources Director how much they contribute to making Utah such a great place to live for both people and wildlife.

- I’m here to talk about something you all know well – the importance of keeping working families on the land – both for their benefit, and for the benefit of the landscape they work so hard to care for.

- No one cares more about the health of the land than farmers and ranchers. No one cares more about the wildlife that share the landscape with them.

- I know, as well as you do, that we can’t ensure the health and productivity of our public and private lands for people and wildlife unless we find a way to work with the agriculture community as partners, and not as adversaries.

- And that’s why it’s more imperative than ever for Wildlife Conservation and Agriculture professionals to work together.

- The challenges we face are too big – in scale, scope, and intensity – for any of us to address alone.

- Simply put, we can’t succeed in conserving America’s native fish and wildlife resources, or in expanding opportunities for all Americans to

enjoy them, unless we successfully engage private landowners, developers and industries and help them.

- When I interviewed for the Director of Utah DWR, Carry Gibson was on the interview panel. I made this statement at the time and have always tried to direct my management actions in a manner that comported with this quote.

- It was a quote by Aldo Leopold who once said, "Conservation will ultimately boil down to rewarding the private landowner who conserves the public interest."

- In the west we certainly have a blend of both public and private lands, but as we know some of the most important areas for agriculture and wildlife were occupied by more than 150 years ago, and wildlife now rely heavily on private lands even when surrounded by large tracts of public land.

- GMO Seeds – cooperative farming with or without neonicotinoids

- One way that the FWS has helped to alleviate conflicts and help protect working ranches and sensitive species that rely upon them is through the Partners for Fish and Wildlife Program.

- This program works to align programs and leverage resources to make it easier for private landowners to implement voluntary conservation measures on their property.

- Our goal is to work with a broad array of public and private partners to build and strengthen sustainable partnerships that endure throughout time.

- That requires us to focus on shared solutions that are easily transferable, scientifically sound, and command a solid return on investment.

- This program has an outstanding record on voluntary private lands with a leveraging ratio of four-to-one.

- That means for every one program dollar expended, four non-program dollars are spent on project delivery.

- But beyond return-on-investment and science, people are what really make a partnership work.

- We have found that no matter how complex the environmental equation is, people are the most important variable, and all solutions run through them.

- If we start with people and commit to finding collaborative solutions, we can achieve amazing things together.

- Hundreds of western farming and ranching operations have relied upon this concept and appreciated the dollars that this program has been able to bring to them.

- Partners like Jay Tanner in Northwest Utah and Jim Stone in Montana understand how they can enhance both wildlife and livestock operations.

- We placed more than $51 million on the ground last year in the Partners program and much of that was for western farming and ranching operations.

- Another important FWS program is the Intermountain West Joint Venture Program that spans most western states and that we invest more that $13 million on annually.

- The IWJV venture program in the west brings local communities and working farm and ranch operators to the table and provide funding and technical resource assistance to ensure landscapes are protected for birds and wildlife, that live side-by-side with private land operations.

- They also bring together funding from other partners such as BLM and NRCS to broaden the assistance that they are able to provide.

- I sat on the Board of the IWJV and very much appreciated the strong relationships that we built with our partners in the west.

- I have been a farm owner in the past, and know many people in the community. In doing so I realize that the most successful operators have a holistic view of the lands and resources that they have been blessed with overseeing for a moment in time in our history.

- And they also realize that healthy lands for grazing and farming are similarly healthy for wildlife, and most people in the industry that I have met take great pride in their responsible stewardship.
- By working together, we believe we can accomplish far more – conserving at-risk and listed species, while keeping working lands economically viable.
-
- Additionally we must also realize that our society will continue to grow and place increasing demands on our land and water resources.
- We can ensure that responsible development occurs in ways that maximize benefits to our nation and its economic future as we do a better job of working together to minimize and avoid negative impacts whenever possible.
- At times that leads to Regulation and that is sometimes necessary. But, regulatory action often does not promote collaboration, which is

necessary to achieve the level of conservation required to ensure the future of wildlife.

- Indeed, regulatory inflexibility can create a counterproductive and adversarial tension as landowners try to balance their need to make a living from the land with public expectations for conserving fish and wildlife.

- When I began in my role under this administration in Washington DC I was tasked with at Presidential Director to eliminate regulations and cut government red tape.

- My Boss, Secreatary of Interior Ryan Zinke has further elaborated on the urgency and need to eliminate outdated or unnecessary regulations.

- So we have done that in a stepwise fashion, as we considered what regulations needed to be revisited. Here are few that we have been able to modify or are in the formal process of modifying.

- Endangered Species Act Regulations

- Mitigation Regulations
- GMO Seed use
- And regulations regarding access, hunting, and fishing on our refuges
- I'll talk for a few moments about each of these.

1. **<u>First ESA Regulations Reform</u>**

- One thing we've heard over and over again from the public and key constituents is that ESA implementation is not consistent and often times very confusing to navigate.
- We need to be good neighbors and steadfast partners. That can't happen unless we're clear and consistent with how we approach conservation with our state and private partners.
- That's why we've proposed a series of improvements designed to produce the best conservation results for the species while reducing the regulatory burden on the American people.

- In July we published to the federal register a set of regulatory changes to the Endangered species act. Those regulations are still our for public comment and we would appreciate any comments that you, you WASDA, or your respective states may want to make.

- We started this process by looking internally at what is working and what may need improvement in the regulatory framework.

- The proposed regulation changes we are proposing include Sections 4 and 7.

- Section 4 is listing and delisting of species and also, designation of critical habitat. Some of the items we have proposed here include,

    - Among the changes we recently proposed were several that relate to how we list, recover and designate critical habitat for threatened and endangered species.
    - First, along with NOAA we've jointly proposed to revise the procedures for designating critical habitat by reinstating a

requirement to first evaluate areas currently occupied by the species before considering unoccupied areas.

- We should first determine if occupied habitat is sufficient for the needs of a species before looking to designate unoccupied habitat and imposing additional regulatory burdens on landowners.
- Second, although we still expect to designate critical habitat for most species, we've long recognized that such designation may not be prudent for some species and circumstances.
- In some cases, it's because doing so could lead collectors to the locations of vulnerable species. In others, it may be because we lack enough information to make credible determinations.
- Accordingly, we've outlined a non-exhaustive list of circumstances under which our agencies may find that designation for a particular species would not be prudent.
- This will help us be more clear and consistent with our determinations.

- The ESA defines a threatened species as one that is likely to become in danger of extinction within the "foreseeable future."
- But what does that mean? Certainly we've had multiple, and sometimes conflicting interpretations of what constitutes the foreseeable future over the years.
- For the first time, we've proposing an interpretation of "foreseeable future" to make it clear that it extends only as far as we can reasonably determine that both future threats and the species' responses to those threats are probable.
- In all of this, our goal is to meet the needs of listed species and the requirements of the Endangered Species Act by tailoring our efforts to individual species.
- Because we know that the needs of bats, and the threats they face, are vastly different than those confronting freshwater mussels or grizzly bears.
- This is why we've separately proposed to rescind the Fish and Wildlife Service's blanket rule under section 4(d) of the ESA,

which automatically conveys the same protections for threatened species as for endangered species unless otherwise specified.

- This change would bring our regulatory approach to threatened species protections in line with that of NOAA Fisheries, which has not employed such a blanket rule.
- By creating a clearer regulatory distinction between threatened and endangered species, we are also encouraging partners to invest in conservation that has the potential to improve a species' status, helping us work towards our ultimate goal: recovery.
- The proposed changes would impact only future listings or downlistings and would not apply to those species already listed as threatened.
- The Fish and Wildlife Service will craft species-specific 4(d) rules for each future threatened species determination that are necessary and advisable for the conservation of the species, as has been standard practice for most species listed as threatened in recent years.

Section 7 Consultations reform of regulations

- Under section 7 of the ESA, other federal agencies consult with the U.S. Fish and Wildlife Service and NOAA Fisheries to ensure their actions are not likely to jeopardize the continued existence of any endangered or threatened species or result in "destruction or adverse modification" of critical habitat.
- We've proposed to simplify and clarify the definition of "destruction or adverse modification" by removing redundant and confusing language.
- The proposed rule is not intended to alter existing consultation practice; rather, it seeks to revise and clarify language that was confusing to other federal agencies and the public.
- Additional proposed revisions to the consultation regulations will clarify whether and how the Fish and Wildlife Service and NOAA Fisheries consider proposed measures to avoid, minimize or offset adverse effects to listed species or their critical habitat when conducting interagency consultations.

- These proposals will improve the consultation process by clarifying how biological opinions and interagency submissions should be formulated.
- Which in turn will make it easier for developers and project proponents to understand how to minimize and avoid impacts to listed species – and to work with other federal agencies to get their projects approved.

Wolves

- Wolf restoration in the Northern Rocky Mountains has been an amazing success thanks to both the resiliency of wolves and the cooperative efforts of Federal, State, and Tribal agencies, conservation groups, and private citizens including ranchers, sportsmen, and outfitters.

- The NRM gray wolf population continues to be robust, stable, and self-sustaining exceeding recovery goals in Idaho, Montana, and Wyoming since 2002.

- Last year, the U.S. Court of Appeals reversed a U.S. District Court decision and issued a final mandate delisting wolves in Wyoming – completing more than a decade of work to recognize the gray wolf's recovery and return management to the states across the Northern Rocky Mountains. Wolves in Montana and Idaho were delisted in 2012.

- We continue to assist, advise, and support state and federal agency partners to ensure a viable, self-sustaining wolf population in Wyoming during the five-year post-delisting monitoring period and into the future.

- Wolves have continued to increase in number and expand their range westward beyond the original NRM boundary in Oregon and Washington and have recently begun to recolonize portions of northern California.

- The Service expects the entire Northern Rocky Mountains wolf population to maintain a long-term average of around 1,000 wolves.

- Wolves in the Northern Rocky Mountains represent a 400-mile extension of a vast contiguous wolf population that numbers over 12,000 wolves in western Canada and about 65,000 wolves across all of Canada and Alaska.

- We've had similar success recovering wolves in the Western Great Lakes region of Michigan, Wisconsin and Minnesota.

- The population there numbers more than 3,800 wolves, exceeding recovery goals for the species. However, due to litigation we've been forced to relist this population of wolves.

- Our goal is to again propose the Western Great Lakes Population for delisting in the near future. Additionally, we're actively reviewing the status of wolves across the contiguous U.S. to determine whether they warrant delisting and if so will propose a delisting rule.

- These are the kinds of successes we need to replicate. Fortunately, we have a steadfast partner in the NRCS and state Agriculture agencies.

Mitigation Policy

- At times, appropriate mitigation may be required to offset the unavoidable impacts of development projects on listed species.
- When mitigation is required, we want to get it right, and make sure it's commensurate with the impacts themselves.
- We need to make sure we use our authority appropriately to further wildlife conservation, while ensuring consistency with applicable statutes and regulations for which we are responsible and utilizing a transparent process for the public.
- That's why we recently decided to withdraw two policies developed in the last days of the previous administration governing mitigation.
- These policies go beyond requiring mitigation that offsets the impact of development, requiring instead that mitigation provide a "net conservation benefit" to affected species.
- We're withdrawing these policies because the Fish and Wildlife Service has insufficient authority to require or recommend "net

conservation gain" throughout all the various Service-related authorities, and is inconsistent with current Executive Branch policy.

- The Service is reinstating its 1981 Mitigation Policy, which established policy for Service recommendations on mitigating the adverse effects of land and water developments.
- The policy was written to help assure consistent and effective recommendations by outlining policy for the levels of mitigation needed and the various methods for accomplishing mitigation.
- GMO SEED
- Cooperative farming on Refuges
- Creating access to our refuge lands
- Opened 381,00 acres in this admin to hunting and fishing
- Eliminated 2,100 lines of regulations.

Finally I wanted to mention the Farm Bill.

Farm Bill

- As we all know, the ESA is only part of the picture. The Farm Bill and its conservation programs have an enormous impact on incentivizing wildlife conservation on private lands - and in providing habitat for hunters and anglers on these lands.
- We've outlined some principles for the pending Farm Bill reauthorization, and are working hard with our allies on the Hill to ensure they're a part of what is eventually approved.
- These include identifying fish and wildlife conservation as a co-equal resource consideration with soil and water conservation in the development, implementation, and evaluation of all Farm Bill conservation programs.
- We also want to magnify the impact of conservation programs by focusing conservation work on priority species and habitats, and by ensuring that the needs of multiple fish and wildlife resources – including pollinators and bats, are considered in the implementation of soil and water conservation practices.

- We want to ensure NRCS and agency partners have the resources necessary to assist farmers, ranchers, and foresters with conservation planning as well as program implementation, delivery, and ongoing management activities.
- Our goal is also to increase coordination and communication among USDA, the Service and our state partners, particularly at the State and local level, to maximize fish and wildlife benefits for Farm Bill conservation and forestry program success.
- With your help, we can make the Farm Bill work better for farmers and wildlife.

Conclusion

- That's the end goal of all of this – to make it easier for people and wildlife to coexist.
- We're wildlife conservation experts, but we also recognize our limitations.
- We're working to overcome decades of mistrust between landowners and our agency.

- As agriculture professionals, you have deep, longstanding and personal ties with farmers and ranchers in your states.
- Our hope is to work with you to help build and strengthen our own relationships with these great people.
- That's what we've tried to do with NRCS, working together to help provide financial and technical assistance to landowners who want to do good things for wildlife.
- We'd love to work with you to do the same thing for the farmers and ranchers you work with.
- Together, we can have a much greater impact for people and wildlife.
- Thank you again for the opportunity to speak to you today. I hope you're able to get out and enjoy Utah over the next few days!

From:	Jesup, Benjamin
To:	Jim Kurth; Stephen Guertin; Ann Navaro
Cc:	Helen Speights; Joan Goldfarb; Kimberly Fondren; Larry Mellinger; Linus Chen; Lynn Long; Nada Naseri; Nancy Brown-Kobil; Philip Kline; Russell Husen; Shawn Finley
Subject:	Fish and Wildlife Branch weekly workload reports
Date:	Thursday, June 15, 2017 9:56:15 AM
Attachments:	Husen report 061417 (redline).docx Mellinger Weekly Report June 14, 2017.docx Naseri report-June 14 2017.docx Goldfarb Report - 6-14-2017.docx Finley Report 6.14.2017 (1).docx Long Report June 14 2017.docx Speights Report June 14 2017.docx Brown-Kobil.June12-16.2017 (1).docx Chen Report 061417 track changes.docx Fondren week of2017-6-14.docx

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Talk to you at 11:30.

Ben

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Ben Jesup
Assistant Solicitor for Fish and Wildlife
Solicitor's Office
Department of the Interior
202-208-3170

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From:	Jesup, Benjamin
To:	Jim Kurth; Stephen Guertin; Romanik, Peg; Charisa Morris
Cc:	Helen Speights; Joan Goldfarb; Kimberly Fondren; Larry Mellinger; Linus Chen; Lynn Long; Nada Naseri; Nancy Brown-Kobil; Philip Kline; Russell Husen; Shawn Finley
Subject:	Fish and Wildlife Branch weekly workload reports
Date:	Thursday, February 8, 2018 8:24:32 AM
Attachments:	Naseri report-Feb 7 2018.docx Kline Report (2-7).docx Speights Report Feb 7 2018.docx Chen Report 020718 track changes.docx Long Report 7 Feb 2018.docx Brown-Kobil.Feb5-9.2018.docx Mellinger Weekly 2-7-2018.docx Finley Report 2.7. 2018(1) (1) (1).docx Husen report 020718 (redline).docx Fondrenweekly2718.doc.docx

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See you at 11.

Ben

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Ben Jesup
Assistant Solicitor for Fish and Wildlife
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Department of the Interior
202-208-3170

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From:	Jesup, Benjamin
To:	Jim Kurth; Stephen Guertin; Charisa Morris; Romanik, Peg
Subject:	Fish and Wildlife Branch weekly workload reports
Date:	Thursday, August 23, 2018 8:19:52 AM
Attachments:	Mellinger Weekly 8-22-2018.docx Speights Report Aug 22 2018.docx Goldfarb Report - 8-22-2018.docx Teshome weekly Aug 22 2018.docx Brown-Kobil.August20-24.2018.docx Finley Report 8.22.2018.docx Long Report 22 Aug 2018.docx Husen report 082218 (redline).docx Chen Report 082218 track changes.docx

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See you at 11:30. FYI, I will be out tomorrow--(b) (6) [redacted]. Russ Husen will be acting.

Ben

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Ben Jesup
Assistant Solicitor for Fish and Wildlife
Solicitor's Office
Department of the Interior
202-208-3170

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From: Jesup, Benjamin
To: Jim Kurth; Stephen Guertin; Ann Navaro
Subject: Fish and Wildlife Branch workload reports
Date: Wednesday, May 10, 2017 4:00:37 PM
Attachments: Husen report 051017 (redline).docx
Mellinger Weekly Report May 10, 2017.docx
Finley Report 5.10.2017 (1).docx
Fondren week of2017-5-10.docx
Goldfarb Report - 5-10-2017.docx
Naseri report-May 10 2017.docx
Long Report May 10 2017.docx
Speights Report May 10 2017.docx
Chen Report 051017 track changes.docx
Brown-Kobil.May8-12.2017.docx

See you tomorrow.

Ben

--
Ben Jesup
Assistant Solicitor for Fish and Wildlife
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202-208-3170

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From: Chen, Linus
To: Jim Kurth; Stephen Guertin; Ann Navaro
Subject: Fish and Wildlife Branch workload reports
Date: Wednesday, May 17, 2017 3:26:22 PM
Attachments: Finley Report 5.17.2017 (1).docx
Kline Report (5-17).docx
Naseri report-May 17 2017.docx
Speights Report May 17 2017.docx
Brown-Kobil.May15-19.2017.docx
Mellinger Weekly Report May 17, 2017.docx
Husen report 051717 (redline).docx
Long Report May 17 2017.docx
Chen Report 051717 track changes.docx

Would you like Ann and I (since I'm acting for Ben Thursday) to meet with you at 11?

--

Linus Y. Chen, Attorney

Division Parks & Wildlife

(w) 202-208-5036

(f) 202-208-3877

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From:	Jesup, Benjamin
To:	Jim Kurth; Stephen Guertin; Romanik, Peg; Charisa Morris
Cc:	Helen Speights; Joan Goldfarb; Kimberly Fondren; Larry Mellinger; Linus Chen; Lynn Long; Nada Naseri; Nancy Brown-Kobil; Philip Kline; Russell Husen; Shawn Finley
Subject:	Fish and Wildlife Branch workload reports
Date:	Thursday, January 18, 2018 8:22:29 AM
Attachments:	Mellinger Weekly 1-17-2018.docx Husen report 011718 (redline).docx Goldfarb Report - 1-17-2018.docx Kline Report (1-17).docx Naseri report-Jan 17 2018.docx Chen Report 011718 track changes.docx Long Report 17 Jan 2018.docx Brown-Kobil.Jan15-18.2018.docx

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With the holiday season and travel behind us, I'm looking forward to getting back together at 11:30.

Ben

--
Ben Jesup
Assistant Solicitor for Fish and Wildlife
Solicitor's Office
Department of the Interior
202-208-3170

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From:	Jesup, Benjamin
To:	Stephen Guertin; Jim Kurth; Charisa Morris; Romanik, Peg
Cc:	Helen Speights; Joan Goldfarb; Kimberly Fondren; Larry Mellinger; Linus Chen; Lynn Long; Nada Naseri; Nancy Brown-Kobil; Philip Kline; Russell Husen; Shawn Finley
Subject:	Fish and Wildlife Branch workload reports
Date:	Wednesday, January 24, 2018 4:28:31 PM
Attachments:	Mellinger Weekly 1-24-2018.docx Husen report 012418.docx Naseri report-Jan 24 2018.docx Speights Report Jan 24 2018.docx Goldfarb Report - 1-24-2018.docx Brown-Kobil.Jan22-26.2018.docx Chen Report 012418 track changes.docx Long Report 24 Jan 2018.docx Kline Report (1-24).docx Finley Report 1.24.2018(1) (1).docx

---

Somehow, it is almost Thursday again. See you tomorrow.

Ben

--
Ben Jesup
Assistant Solicitor for Fish and Wildlife
Solicitor's Office
Department of the Interior
202-208-3170

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From:	Jesup, Benjamin
To:	Jim Kurth; Stephen Guertin; Charisa Morris; Romanik, Peg
Cc:	Helen Speights; Joan Goldfarb; Kimberly Fondren; Larry Mellinger; Linus Chen; Lynn Long; Nada Naseri; Nancy Brown-Kobil; Philip Kline; Russell Husen; Shawn Finley
Subject:	Fish and Wildlife Branch workload reports
Date:	Thursday, August 30, 2018 8:41:39 AM
Attachments:	Kline Report (8-29).docx Speights Report Aug 29 2018.docx Brown-Kobil.Aug.27-31.2018.docx Long Report 29 Aug 2018.docx Teshome weekly Aug 29 2018.docx Chen Report 082918 track changes.docx Mellinger Weekly 8-29-2018.docx Finley Report 8.29.2018.docx

---

It's been a while. See you at 11:30. FYI, I will be on leave tomorrow.

Ben

--
Ben Jesup
Assistant Solicitor for Fish and Wildlife
Solicitor's Office
Department of the Interior
202-208-3170

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From: Jesup, Benjamin
To: Jim Kurth; Stephen Guertin; Romanik, Peg; Charisa Morris
Subject: Fish and Wildlife Branch workload reports
Date: Thursday, September 6, 2018 9:09:55 AM
Attachments: Mellinger Weekly 9-5-2018.docx
Fondren Weekly9518.docx
Finley Report 9.5.2018.docx
Brown-Kobil.Sep3-7.2018.docx
Goldfarb Report - 9-5-2018.docx
Long Report 5 Sep 2018.docx
Husen report 090518 (redline).docx
Chen Report 09518 track changes.docx
Teshome weekly Sep 5 2018.docx
Speights Report Sept 5 2018.docx

See you at 11:30.

Ben

--
Ben Jesup
Assistant Solicitor for Fish and Wildlife
Solicitor's Office
Department of the Interior
202-208-3170

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From:	Jesup, Benjamin
To:	Jim Kurth; Stephen Guertin; Ann Navaro
Cc:	Helen Speights; Joan Goldfarb; Kimberly Fondren; Larry Mellinger; Linus Chen; Lynn Long; Nada Naseri; Nancy Brown-Kobil; Philip Kline; Russell Husen; Shawn Finley
Subject:	In lieu of meeting today . . . .
Date:	Thursday, June 1, 2017 8:55:18 AM
Attachments:	Kline Report (5-31).docx Husen report 053117 (redline).docx Mellinger Weekly Report May 31, 2017.docx Finley Report 5.31.2017 (1).docx Goldfarb Report - 5-31-2017.docx Chen Report 053117 track changes.docx Long Report May 31 2017.docx Brown-Kobil.May29-June2.2017 (1).docx Naseri report-May 31 2017.docx Fondren week of2017-5-31.docx

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Jim and Steve:

(b) (5) ACP, (b) (5) DPP [redacted]

Attached are the Fish and Wildlife Branch workload reports.

See you next week.

Ben

--
Ben Jesup
Assistant Solicitor for Fish and Wildlife
Solicitor's Office
Department of the Interior
202-208-3170

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From: E&E News
To: stephen_guertin@fws.gov
Subject: January 20 -- Greenwire is ready
Date: Friday, January 20, 2017 12:38:43 PM

Read today's Greenwire on the web

AN E&E NEWS PUBLICATION

USFWS has AGENCY WIDE ACCESS to E&E's entire suite of services! The best way to track energy and environmental policy news and information.

Here are your personal access codes:

Username: stephen_guertin@fws.gov
Password: eenews

GREENWIRE — Fri., January 20, 2017

READ FULL EDITION

1. INAUGURATION:

Trump takes reins, lays out energy plan

President Trump painted a grim portrait of the United States today during his inaugural speech as he pledged to "start winning again" and insisted, "I will never, ever let you down."

TOP STORIES

2. CLIMATE:

Dusting for Trump fingerprints on agency websites

3. MISSISSIPPI RIVER:

Exiting Obama hamstrings hot-button flood project

4. TRANSMISSION:

BLM approves massive project's route despite Idaho objections

INAUGURATION

5. WHITE HOUSE:

Obama's farewell: 'You made me a better man'

6. CONGRESS:

Senate Democrats somberly attend inauguration

7. ADVOCACY:

Climate activists block inaugural gate for hours

TRANSITION

8. LAW:
Clean Water Act guru, WOTUS defender retiring

9. RENEWABLE ENERGY:
Trump Treasury pick backs wind credit — for now

POLITICS

10. Q&A:
Clinton confidante Granholm isn't moving to Canada

11. FORESTRY:
Pruitt 'very concerned' about sustainable lumber policy

12. CLIMATE:
Gore pushes action at Sundance documentary premiere

NATURAL RESOURCES

13. FISH AND WILDLIFE:
Ashe goes to zoo, aquarium group; Kurth named acting chief

14. COAL:
Pizarchik laments 'pure propaganda' against Obama regs

15. BLM:
Kornze urges staff to keep engaged despite 'pendulum' swings

16. NATIONAL MONUMENTS:
Battle over Ore. lands winds down, for now

17. WILDLIFE:
Conservation groups sue feds over farming in waterfowl refuge

18. WILDLIFE:
Circus shutdown raises concern for animals' future

19. SCIENCE:
Researchers enter dome to simulate living on Mars

20. OBITUARY:
Woman who battled river development dies at 94

LAW

21. AIR POLLUTION:
EPA offers 2-pronged legal attack on MACT rule critics

22. YELLOWSTONE:
Jail time, fines for pranksters who trespassed on hot spring

23. WILDLIFE:
Forest Service, Idaho illegally collected environmental data

24. WATER POLLUTION:
Reclamation settles over Columbia River oil discharges

25. PUBLIC LANDS:

Man admits making meth after BLM rangers find waste

ENERGY

26. PIPELINES:

PHMSA rules to speed up spill-response time

FEDERAL AGENCIES

27. EPA:

Deputy looks to next generation of environmental leaders

28. EPA:

Exiting enforcement chief defends 'new generation' strategy

AIR AND WATER

29. AIR POLLUTION:

EPA delays Del. ozone compliance petition response

30. COLORADO RIVER:

Ariz. cities could face severe cuts without deal — report

31. GULF OF MEXICO:

Feds attempt to stem leaking La. pipeline

CHEMICALS

32. CHEMICALS:

EPA limits companies' ability to keep trade secrets

33. CHEMICALS:

Legacy of pesticide testing taints Apache reservation

STATES

34. OREGON:

Study finds gaps in DEQ transparency

35. TEXAS:

San Antonio joins endangered species habitat plan

INTERNATIONAL

36. ITALY:

Crews rescue 6 people buried in avalanche

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From: Sheehan, Gregory
To: Ross Melinchuk
Subject: Re: [EXTERNAL] Fwd: Ducks Unlimited, NWTF applaud reversal of GMO crop ban
Date: Sunday, August 5, 2018 8:16:30 PM

Thank you Ross for sharing and for NWTF's support.

Hope to you soon,
Greg

Greg Sheehan
Principal Deputy Director
US Fish and Wildlife Service
202-208-4545 office
202-676-7675 cell

On Aug 5, 2018, at 8:30 AM, Ross Melinchuk <rmelinchuk@nwtf.net> wrote:

> For your info. Ross
>
> Begin forwarded message:
>
> **From:** "NWTF News" <nwtf_news@nwtf.org>
> **Date:** August 2, 2018 at 8:04:13 PM EDT
> **To:** rmelinchuk@nwtf.net
> **Subject: Ducks Unlimited, NWTF applaud reversal of GMO crop ban**
> **Reply-To:** "NWTF News" <pr@nwtf.net>

For Immediate Release

For more information, contact Pete Muller at (803) 637-7698

Ducks Unlimited, NWTF applaud reversal of GMO crop ban

USFWS order allows GMO crops on national wildlife refuges

EDGEFIELD, S.C. — Ducks Unlimited and the National Wild Turkey Federation applaud today's reversal of a U.S. Fish and Wildlife Service order banning GMO crops on national wildlife refuges.

The ban, announced in 2014, significantly decreased food availability and management

options for waterfowl and other wildlife.

“Ducks Unlimited and the NWTF advocate for science-based decision making,” said Ducks Unlimited CEO Dale Hall. “That includes bringing attention to decisions that restrict effective wildlife management and were clearly not based on science. We are pleased the USFWS reversed this decision and restored this essential tool for waterfowl and wildlife management to our National Wildlife Refuges.”

The rhetoric surrounding GMOs was used as the reason for effectively canceling this program. While there is no consensus that GMO crops are dangerous to human health, there are concerns about chemical use in farming operations, which are needed to effectively produce quality crops. However, to safeguard against the use of any chemicals dangerous to wildlife, refuges are required to submit a pesticide use proposal for approval by contaminant specialists in the USFWS. Through this process, potential threats to people or wildlife will be fully addressed.

“We applaud the Service’s recognition that their farming practices must stay current with common products and technology to sustain wildlife populations the refuge system was created to conserve,” said NWTF CEO Becky Humphries.

Due to the reversal, the National Wildlife Refuge System will now determine when GMO crops should be used on a case-by-case basis.

About the National Wild Turkey Federation
When the National Wild Turkey Federation was founded in 1973, there were about 1.3 million wild turkeys in North America. After decades of work, that number hit a historic high of almost 7 million turkeys. To succeed, the NWTF stood behind science-based conservation and hunters’ rights. The NWTF Save the Habitat. Save the Hunt. initiative is a charge that mobilizes science, fundraising and devoted volunteers to raise $1.2 billion to conserve and enhance more than 4 million acres of essential wildlife habitat, recruit at least 1.5 million hunters and open access to 500,000 acres for hunting. For more information, visit NWTF.org.

About Ducks Unlimited
Ducks Unlimited Inc. is the world's largest nonprofit organization dedicated to conserving North America's continually disappearing waterfowl habitats. Established in 1937, Ducks Unlimited has conserved more than 14 million acres thanks to contributions from more than a million supporters across the continent. Guided by science and dedicated to program efficiency, DU works toward the vision of wetlands sufficient to fill the skies

with waterfowl today, tomorrow and forever. For more information on our work, visit www.ducks.org.

National Wild Turkey Federation
770 Augusta Rd., Edgefield, SC 29824

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From:	Jesup, Benjamin
To:	Jim Kurth; Stephen Guertin; Ann Navaro
Subject:	Fish and Wildlife Branch weekly workload reports
Date:	Wednesday, May 24, 2017 4:32:58 PM
Attachments:	Finley Report 5.24.2017 (1).docx Husen report 052417 (redline).docx Mellinger Weekly Report May 24, 2017.docx Goldfarb Report - 5-24-2017.docx Fondren week of2017-5-24.docx Speights Report May 24 2017.docx Long Report May 24 2017.docx Brown-Kobil.May22-26.2017.docx Chen Report 052417 track changes.docx

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FYI. See you tomorrow.

Ben

--
Ben Jesup
Assistant Solicitor for Fish and Wildlife
Solicitor's Office
Department of the Interior
202-208-3170

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From:	Jesup, Benjamin
To:	Jim Kurth; Stephen Guertin; Ann Navaro
Cc:	Helen Speights; Joan Goldfarb; Kimberly Fondren; Larry Mellinger; Linus Chen; Lynn Long; Nada Naseri; Nancy Brown-Kobil; Philip Kline; Russell Husen; Shawn Finley
Subject:	Fish and Wildlife Branch weekly workload reports
Date:	Thursday, June 8, 2017 8:45:59 AM
Attachments:	Chen Report 060717 track changes.docx Mellinger Weekly Report June 7, 2017.docx Husen report 060717 (redline).docx Fondren week of2017-6-7-17.docx Kline Report (6-7).docx Naseri report-June 7 2017.docx Speights Report June 7 2017.docx Long Report June 7 2017.docx Brown-Kobil.June5-9.2017 (1).docx Finley Report 6.7.2017 (1).docx

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See you at 11:30.

Ben

--
Ben Jesup
Assistant Solicitor for Fish and Wildlife
Solicitor's Office
Department of the Interior
202-208-3170

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From: Randolph, Nikki
To: Charisa Morris; Jim Kurth; Stephen Guertin
Subject: Over Due Correspondence
Date: Monday, September 10, 2018 10:54:53 AM
Attachments: 10 Sept Dir Overdue.rtf
10 September EXSEC overdue.rtf

--
Nikki S. Randolph
Chief, CCU
U.S. Fish and Wildlife Service
202-208-7535

> *"There cannot be a crisis next week. My schedule is already full"* -- *Henry Kissinger*

FISH AND WILDLIFE SERVICE

Directors Over due Report

Date: 09/10/2018

Office: CCU

DCN	Subject	Asgnd Date	Asgnd To	Due Date	Sig	Task	Addressee
	OVER DUE						
Nonresponsive Records	[redacted]						
[redacted]	[redacted]						
[redacted]	[redacted]						
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[redacted]	[redacted]						
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[redacted]	[redacted]						

FISH AND WILDLIFE SERVICE

Executive Secretary Office

Date: 09/10/2018

DCN	Es No	Subject	Asgnd Date	ES Due	DCN Due	Sig	Asgnd To	Task	Addressee
		OVER DUE							
Nonresponsive Records	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
068320	008654	Ban on use of genetically modified (GMO) seed by commercial agriculture on national wildlife refuges	07/13/2018	07/02/2018	07/02/2018	A/S	AEA-CLA	Surname	Abraham (lost package. Last seen with CLA)
[redacted]	[redacted]	[redacted]	[redacted]	Nonresponsive Records	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

From: Randolph, Nikki
To: Charisa Morris; Jim Kurth; Stephen Guertin; Greg Sheehan
Subject: Over Due Correspondence
Date: Tuesday, August 14, 2018 10:19:41 AM
Attachments: 14 Aug Director Overdue.rtf
14 Aug EXSEC Overdue.rtf

--
Nikki S. Randolph
Chief, CCU
U.S. Fish and Wildlife Service
202-208-7535

> *"There cannot be a crisis next week. My schedule is already full"* -- *Henry Kissinger*

FISH AND WILDLIFE SERVICE

Director's Over Due Report

Date: 08/14/2018

Office: CCU

DCN	Subject	Asgnd Date	Asgnd To	Due Date	Sig	Task	Addressee
Nonresponsive Records	[redacted]						
[redacted]	[redacted]						
[redacted]	[redacted]						
[redacted]	[redacted]						
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]			
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]			
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]			
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]			
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]			
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]			
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]			s (DUE TUESDAY)

FISH AND WILDLIFE SERVICE

Executive Secretary Office OVER DUE LIST

Date: 08/14/2018

Nonresponsive Records

068320	008654	Ban on use of genetically modified (GMO) seed by commercial agriculture on national wildlife refuges	07/13/2018	07/02/2018	07/02/2018	A/S	AEA-CLA	Surname	Abraham **(WITH AEA CLA corrections)**

Nonresponsive Records

FISH AND WILDLIFE SERVICE

Executive Secretary Office OVER DUE LIST

Date: 08/14/2018

	Nonresponsive Records						Response	Assigne)
Nonresponsive Records								

From: Randolph, Nikki
To: Charisa Morris; Jim Kurth; Stephen Guertin
Subject: over due list
Date: Monday, July 16, 2018 11:29:15 AM
Attachments: jULY 16 Director Over due.rtf
July 16 EXSEC overdue.rtf

--
Nikki S. Randolph
Chief, CCU
U.S. Fish and Wildlife Service
202-208-7535

> *"There cannot be a crisis next week. My schedule is already full"* -- *Henry Kissinger*

U.S. FISH AND WILDLIFE SERVICE

CCU/DIRECTOR OVERDUE

Date: 07/16/2018

Office: CCU

DCN	Subject	Asgnd Date	Asgnd To	Due Date	Sig	Task	Addressee
	OVERDUE						
[redacted]	[redacted]	[redacted]	[redacted]	Nonresponsive Records	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

U.S. FISH AND WILDLIFE SERVICE

CCU/DIRECTOR OVERDUE

Date: 07/16/2018

Office: CCU

FISH AND WILDLIFE SERVICE

Executive Secretary Office

Date: 07/16/2018

DCN	Es No	Subject	Asgnd Date	ES Due	DCN Due	Sig	Asgnd To	Task	Addressee
		OVER DUE							
Nonresponsive Records	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
068320	008654	Ban on use of genetically modified (GMO) seed by commercial agriculture on national wildlife refuges	07/13/2018	07/02/2018	07/02/2018	A/S	D	Surname	Abraham (DIRECTOR OFFICE FOR SURNAME)
Nonresponsive Records	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

FISH AND WILDLIFE SERVICE

Executive Secretary Office

Date: 07/16/2018

DCN	Es No	Subject	Asgnd Date	ES Due	DCN Due	Sig	Asgnd To	Task	Addressee
		priority in FY2019 Budget if higher level [redacted]							Nonresponsive Records
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]		[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]		[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Report Filters: Open items only

From: Randolph, Nikki
To: Charisa Morris; Jim Kurth; Stephen Guertin
Subject: Over Due Lists
Date: Monday, June 25, 2018 10:55:06 AM
Attachments: Directors Overdue Report June 25.rtf
EXSEC over due June 25.rtf

--
Nikki S. Randolph
Chief, CCU
U.S. Fish and Wildlife Service
202-208-7535

> *"There cannot be a crisis next week. My schedule is already full"* -- *Henry Kissinger*

FISH AND WILDLIFE SERVICE

DIRECTORS OFFICE REPORT

Date: 06/25/2018

Office: CCU

DCN	Subject	Asgnd Date	Asgnd To	Due Date	Sig	Task	Addressee
Nonresponsive Records							

FISH AND WILDLIFE SERVICE

Executive Secretary Office

Date: 06/25/2018

DCN	Es No	Subject	Asgnd Date	ES Due	DCN Due	Sig	Asgnd To	Task	Addressee
Nonresponsive Records									
068320	008654	Ban on use of genetically modified (GMO) seed by commercial agriculture on national wildlife refuges	**06/12/2018**	07/02/2018	07/02/2018	A/S	AEA-CLA	Prepare Draft Response	Abraham(NO MOVEMENT FROM CLA AS OF 6/12)

FISH AND WILDLIFE SERVICE

Executive Secretary Office

Date: 06/25/2018

DCN	Es No	Subject	Asgnd Date	ES Due	DCN Due	Sig	Asgnd To	Task	Addressee
Nonresponsive Records									

From:	Randolph, Nikki
To:	Charisa Morris; Jim Kurth; Stephen Guertin
Cc:	Peterson, Nicole; A Alvarez; Acquanetta Reese; Amy Lueders; April Evans; Barbara Wainman; Charles Wooley; Conni Conner; Cynthia Martinez; David Hoskins; David Miko; Deborah Paige; Delores Bigby; Denise Sanchez; Denise Sheehan; Donnise Hancock; Edward Grace; Gary Frazer; Gina Shultz; Gloria Bell; Gregory Siekaniec; Janine Velasco; Jerome Ford; Joan Mundt; Jody Holzworth; Karen Clark; Kathleen King; Kenneth Taylor; Lois Wellman; Lucille Frerich; Martin Kodis; Matt Hogan; Matthew Huggler; Meghan Snow; Michael Oetker; Mike Johnson; Nicole Sedlacek; Noreen Walsh; Paul Rauch; Paul Souza; Rebekah Giddings; Roslyn Sellars; Seth Mott; shelley_hartmann; Stacey Garcia; Stephanie Potter; Theresa Rabot; Thomas Irwin; Vicki Finn; Wanda Cantrell; Wendi Weber; Xiomara Labiosa; Kashyap Patel
Subject:	Over due report
Date:	Monday, August 20, 2018 2:21:32 PM
Attachments:	20 Aug Directors Over due.rtf 20 August EXSEC OVERDUE.rtf

---

As of this typing, all White House Referrals assigned for action, have been completed. Thanks everyone!!!

--
Nikki S. Randolph
Chief, CCU
U.S. Fish and Wildlife Service
202-208-7535

> *"There cannot be a crisis next week. My schedule is already full"* -- *Henry Kissinger*

U.S. FISH AND WILDLIFE SERVICE

Director's Over Due List

Date: 08/20/2018

Office: CCU

DCN	Subject	Asgnd Date	Asgnd To	Due Date	Sig	Task	Addressee
	OVER DUE OR Due This Week						
Nonresponsive Records	[redacted]						

FISH AND WILDLIFE SERVICE

Executive Secretary Office

Date: 08/20/2018

DCN	Es No	Subject	Asgnd Date	ES Due	DCN Due	Sig	Asgnd To	Task	Addressee
		OVER DUE							
Nonresponsive Records	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
068320	008654	Ban on use of genetically modified (GMO) seed by commercial agriculture on national wildlife refuges	07/13/2018	07/02/2018	07/02/2018	A/S	AEA-CLA	Surname	Abraham **(HELD by D office)**
Nonresponsive Records	[redacted]	[redacted]	[redacted]		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
		[redacted]							
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

From: Randolph, Nikki
To: Charisa Morris; Jim Kurth; Stephen Guertin; Greg Sheehan
Subject: Over Due Reporta
Date: Monday, August 6, 2018 10:06:50 AM
Attachments: 6 Aug EXSEC overdue.rtf
Aug 6 Directors Office Overdue List.rtf

--
Nikki S. Randolph
Chief, CCU
U.S. Fish and Wildlife Service
202-208-7535

> *"There cannot be a crisis next week. My schedule is already full"* -- *Henry Kissinger*

FISH AND WILDLIFE SERVICE

Executive Secretary Office

Date: 08/06/2018

DCN	Es No	Subject	Asgnd Date	ES Due	DCN Due	Sig	Asgnd To	Task	Addressee
		OVERDUE							
[redacted]	[redacted]	[redacted]	[redacted]	Nonresponsive Records	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
068320	008654	Ban on use of genetically modified (GMO) seed by commercial agriculture on national wildlife refuges	07/13/2018	07/02/2018	07/02/2018	A/S	D	Surname	Abraham (HELD IN DIRECTORS OFFICE)
Nonresponsive Records	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

FISH AND WILDLIFE SERVICE

Executive Secretary Office

Date: 08/06/2018

DCN	Es No	Subject	Asgnd Date	ES Due	DCN Due	Sig	Asgnd To	Task	Addressee
		NOT QUITE OVERDUE YET……..							
Nonresponsive Records	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Report Filters: Open items only

USFWS DIRECTOR'S OVER DUE REPORT

Date: 08/06/2018

Office: CCU

DCN	Subject	Asgnd Date	Asgnd To	Due Date	Sig	Task	Addressee
	OVERDUE						
Nonresponsive Records	[redacted]						
[redacted]	[redacted]						
[redacted]	[redacted]						
[redacted]	[redacted]						
[redacted]	[redacted]						
[redacted]	[redacted]						
[redacted]	[redacted]						
[redacted]	[redacted]						
[redacted]	[redacted]						
[redacted]	[redacted]						
[redacted]	[redacted]						
[redacted]	[redacted]						
[redacted]	[redacted]						
[redacted]	[redacted]						

USFWS DIRECTOR'S OVER DUE REPORT

Date: 08/06/2018

Office: CCU

DCN	Subject	Asgnd Date	Asgnd To	Due Date	Sig	Task	Addressee
[redacted]	Nonresponsive Records [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

From:	Randolph, Nikki
To:	Charisa Morris; Jim Kurth; Stephen Guertin; Greg Sheehan
Subject:	Over Due Reports
Date:	Monday, July 23, 2018 1:21:35 PM
Attachments:	Federal Register Log 23 July.xls July 23 Director Over Due.rtf July 23 ExSec Over Due List.rtf

---

Compared to the rest of the Bureuas, once again the USFWS sets the standards that other bureaus wish they could reach!!! LOL

thanks everyone for their due diligence in getting things done as quickly as possible,

--
Nikki S. Randolph
Chief, CCU
U.S. Fish and Wildlife Service
202-208-7535

> *"There cannot be a crisis next week. My schedule is already full"* -- *Henry Kissinger*

FISH AND WILDLIFE SERVICE

Directors Over Due List

Date: 07/23/2018

Office: CCU

DCN	Subject	Asgnd Date	Asgnd To	Due Date	Sig	Task	Addressee
	OVER DUE						
Nonresponsive Records	[redacted]						
[redacted]	[redacted]						
[redacted]	[redacted]						
[redacted]	[redacted]						
[redacted]	[redacted]						
[redacted]	[redacted]						
[redacted]	[redacted]						
[redacted]	[redacted]						

FISH AND WILDLIFE SERVICE

Executive Secretary Office

Date: 07/23/2018

DCN	Es No	Subject	Asgnd Date	ES Due	DCN Due	Sig	Asgnd To	Task	Addressee
		OVER DUE							STATUS
Nonresponsive Records		[redacted]							
[redacted]		[redacted]							
[redacted]		[redacted]							
[redacted]		[redacted]							
[redacted]		[redacted]							
[redacted]		[redacted]							
068320	008654	Ban on use of genetically modified (GMO) seed by commercial agriculture on national wildlife refuges	07/13/2018	07/02/2018	07/02/2018	A/S	D	Surname	Abraham (D Office for Surname)
Nonresponsive Records		[redacted]							

FISH AND WILDLIFE SERVICE

Executive Secretary Office

Date: 07/23/2018

DCN	Es No	Subject	Asgnd Date	ES Due	DCN Due	Sig	Asgnd To	Task	Addressee
		ALMOST OVERDUE							
Nonresponsive Records	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Report Filters: Open items only

From:	Randolph, Nikki
To:	Charisa Morris; Jim Kurth; Stephen Guertin; Greg Sheehan
Subject:	Over Due Reports
Date:	Monday, July 30, 2018 8:57:47 AM
Attachments:	30 July Director Overdue.rtf 30 July EXSEC OVERDUE.rtf

---

Out of 20 Packages that we are tracking between EXSEC and DIR… 10 of them are stuck in OCL and many have been there well over 3 weeks +

Good job everyone!!!!

--
Nikki S. Randolph
Chief, CCU
U.S. Fish and Wildlife Service
202-208-7535

> *"There cannot be a crisis next week. My schedule is already full" -- Henry Kissinger*

FISH AND WILDLIFE SERVICE

DIRECTOR'S OVER DUE REPORT

Date: 07/30/2018

Office: CCU

DCN	Subject	Asgnd Date	Asgnd To	Due Date	Sig	Task	Addressee
	DIRECTORS OVER DUE REPORT						
	OVERDUE						
Nonresponsive Records	[redacted]						

FISH AND WILDLIFE SERVICE

Executive Secretary Office

Date: 07/30/2018

DCN	Es No	Subject	Asgnd Date	ES Due	DCN Due	Sig	Asgnd To	Task	Addressee
		EXSEC OVER DUE							
		OVERDUE							
Nonresponsive Records	[redacted]	[redacted]	[redacted]		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
068320	008654	Ban on use of genetically modified (GMO) seed by commercial agriculture on national wildlife refuges	07/13/2018	07/02/2018	07/02/2018	A/S	D	Surname	***Abraham*** ***(HELD UP IN DIRECTORS OFFICE SINCE 7/13)***
Nonresponsive Records	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

FISH AND WILDLIFE SERVICE

Executive Secretary Office

Date: 07/30/2018

DCN	Es No	Subject	Asgnd Date	ES Due	DCN Due	Sig	Asgnd To	Task	Addressee
Nonresponsive Records									

From: Randolph, Nikki
To: Charisa Morris; Jim Kurth; Stephen Guertin
Subject: Over Due Reports
Date: Monday, September 17, 2018 9:11:27 AM
Attachments: Sept 17 Dir over Due.rtf
Sept 17 EXSEC overdue.rtf

--
Nikki S. Randolph
Chief, CCU
U.S. Fish and Wildlife Service
202-208-7535

> *"There cannot be a crisis next week. My schedule is already full"* -- *Henry Kissinger*

FISH AND WILDLIFE SERVICE

DIRECTORS OVER DUE LIST

Date: 09/17/2018

Office: CCU

DCN	Subject	Asgnd Date	Asgnd To	Due Date	Sig	Task	Addressee
	OVER DUE						
Nonresponsive Records	[redacted]						
[redacted]	[redacted]						
[redacted]	[redacted]						
[redacted]	[redacted]						
[redacted]	[redacted]						
[redacted]	[redacted]						
[redacted]	[redacted]						
[redacted]	[redacted]						
[redacted]	[redacted]						
[redacted]	[redacted]						
[redacted]	[redacted]						

FISH AND WILDLIFE SERVICE
EXSEC OVER DUE LIST

Date: 09/17/2018

DCN	Es No	Subject	Asgnd Date	ES Due	DCN Due	Sig	Asgnd To	Task	Addressee
		OVER DUE							
Nonresponsive Records	[redacted]	[redacted]	[redacted]		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
068320	008654	Ban on use of genetically modified (GMO) seed by commercial agriculture on national wildlife refuges	09/17/2018	07/02/2018	07/02/2018	A/S	AEA	See Comments	Abraham **(LOST PACKAGE AEA needs to recreate or find package and return to Directors office)**
Nonresponsive Records	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

FISH AND WILDLIFE SERVICE
EXSEC OVER DUE LIST

Date: 09/17/2018

From: Randolph, Nikki
To: Charisa Morris; Jim Kurth; Stephen Guertin
Subject: Over Due Reports
Date: Monday, June 18, 2018 12:38:50 PM
Attachments: 18 June 2018 Directors Overdue List.rtf
18 June 2018 EXSEC Overdue Report.rtf

--
Nikki S. Randolph
Chief, CCU
U.S. Fish and Wildlife Service
202-208-7535

> *"There cannot be a crisis next week. My schedule is already full"* -- *Henry Kissinger*

FISH AND WILDLIFE SERVICE

Directors Over Due List

Date: 06/18/2018

Office: CCU

DCN	Subject	Asgnd Date	Asgnd To	Due Date	Sig	Task	Addressee
	OVERDUE						
[redacted]	[redacted]	[redacted]	[redacted]	Nonresponsive Records	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
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FISH AND WILDLIFE SERVICE

Directors Over Due List

Date: 06/18/2018

Office: CCU

DCN	Subject	Asgnd Date	Asgnd To	Due Date	Sig	Task	Addressee
[redacted]	Nonresponsive Records [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	

FISH AND WILDLIFE SERVICE

Executive Secretary Office

Date: 06/18/2018

DCN	Es No	Subject	Asgnd Date	ES Due	DCN Due	Sig	Asgnd To	Task	Addressee
		OVERDUE							
Nonresponsive Records									

FISH AND WILDLIFE SERVICE

Executive Secretary Office

Date: 06/18/2018

DCN	Es No	Subject	Asgnd Date	ES Due	DCN Due	Sig	Asgnd To	Task	Addressee
Nonresponsive Records									
EST-00008654		Ban on use of genetically modified (GMO) seed by commercial agriculture on national wildlife refuges	06/11/2018	07/02/2018	07/02/2018	A/S	CCU-OES	Prepare Draft Response	Abraham (ANRS Drafting)

From: Randolph, Nikki
To: Charisa Morris; Jim Kurth; Stephen Guertin
Subject: Overdue Reports
Date: Monday, July 2, 2018 9:41:08 AM
Attachments: 2 uly Directors over due.rtf
July 2 EXEC Overdue.rtf

--
Nikki S. Randolph
Chief, CCU
U.S. Fish and Wildlife Service
202-208-7535

> *"There cannot be a crisis next week. My schedule is already full"* -- *Henry Kissinger*

FISH AND WILDLIFE SERVICE

DIRECTORS OVERDUE REPORT

Date: 07/02/2018

Office: CCU

DCN	Subject	Asgnd Date	Asgnd To	Due Date	Sig	Task	Addressee
	OVER DUE						
Nonresponsive Records	[redacted]	[redacted]	[redacted]		[redacted]	[redacted]	[redacted]
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FISH AND WILDLIFE SERVICE

Executive Secretary Office

Date: 07/02/2018

DCN	Es No	Subject	Asgnd Date	ES Due	DCN Due	Sig	Asgnd To	Task	Addressee
		EXSEC OVER DUE LISTT							
Nonresponsive Records	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
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068320	008654	Ban on use of genetically modified (GMO) seed by commercial agriculture on national wildlife refuges	06/27/2018	07/02/2018	07/02/2018	A/S	ANRS	Surname through DTS	Abraham(**WAITING ON ANRS TO SURNAME)**

FISH AND WILDLIFE SERVICE

Executive Secretary Office

Date: 07/02/2018

DCN	Es No	Subject	Asgnd Date	ES Due	DCN Due	Sig	Asgnd To	Task	Addressee
		NOT OVERDUE YET							
Nonresponsive Records	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
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From:	Randolph, Nikki
To:	Charisa Morris; Jim Kurth; Stephen Guertin
Cc:	Peterson, Nicole; Acquanetta Reese; April Evans; Charles Wooley; Conni Conner; Cynthia Martinez; David Miko; Deborah Paige; Delores Bigby; Denise Sanchez; Donnise Hancock; Edward Grace; Gary Frazer; Gina Shultz; Gloria Bell; Jerome Ford; Joan Mundt; Jody Holzworth; Kathleen King; Kenneth Taylor; Lois Wellman; Martin Kodis; Matt Hogan; Matthew Huggler; Meghan Snow; Mike Johnson; Nicole Sedlacek; Paul Souza; Roslyn Sellars; Stacey Garcia; Stephanie Potter; Theresa Rabot; Thomas Irwin; Wanda Cantrell; Wendi Weber; Kashyap Patel
Subject:	Overdue Reports
Date:	Tuesday, June 12, 2018 9:52:43 AM
Attachments:	June 12 Directors Report.rtf June 12 EXEC SEC Overdue Report.rtf

---

Welcome them back!!!! Not as bad as you might have thought…that's cause you all Rock!!!

--
Nikki S. Randolph
Chief, CCU
U.S. Fish and Wildlife Service
202-208-7535

> *"There cannot be a crisis next week. My schedule is already full"* -- *Henry Kissinger*

FISH AND WILDLIFE SERVICE

Date: 06/12/2018

Office: CCU

DCN	Subject	Asgnd Date	Asgnd To	Due Date	Sig	Task	Addressee
Nonresponsive Records							

FISH AND WILDLIFE SERVICE

Executive Secretary Office

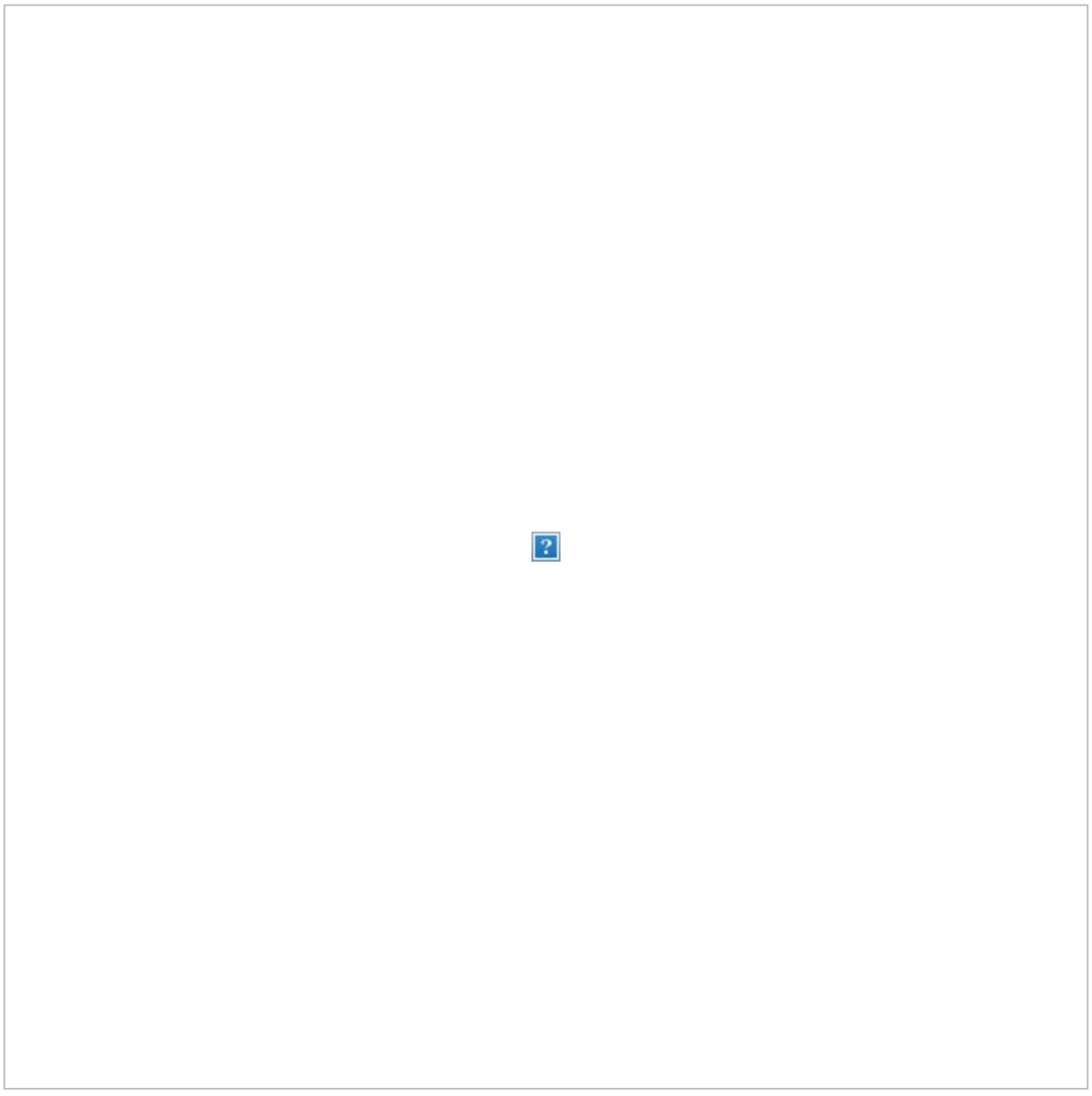
Date: 06/12/2018

DCN	Es No	Subject	Asgnd Date	ES Due	DCN Due	Sig	Asgnd To	Task	Addressee
		OVERDUE							
Nonresponsive Records		[redacted]							
EST-00008654		Ban on use of genetically modified (GMO) seed by commercial agriculture on national wildlife refuges	06/11/2018	07/02/2018	07/02/2018	A/S	CCU-OES	Prepare Draft Response	Abraham (Draft Due end of June)

From: USGS GeoHealth Newsletter
To: Stephen_Guertin@FWS.gov
Subject: New Issue of the USGS GeoHealth Newsletter
Date: Thursday, January 18, 2018 12:32:21 PM

New Issue of the U.S. Geological Survey GeoHealth Newsletter

View this email in your browser



Newsletter

The U.S. Geological Survey's Environmental Health Newsletter

Volume 15, Number 1, 2018

Forward Tweet Share +1 Share

New Method Developed to Quantify Spatial Extent of Cyanobacterial Blooms

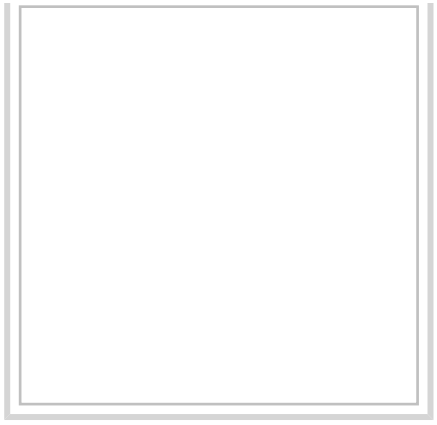
This study provides a method for quantifying changes in the spatial extent of cyanobacterial blooms at local and regional scales using remotely sensed data to determine if bloom occurrence and size are increasing or decreasing for inland water resources. ...

Read Full Article

Understanding Associations between Mussel Productivity and Cyanotoxins in Lake Erie

Study findings indicate that cyanobacteria and cyanotoxins were not associated with

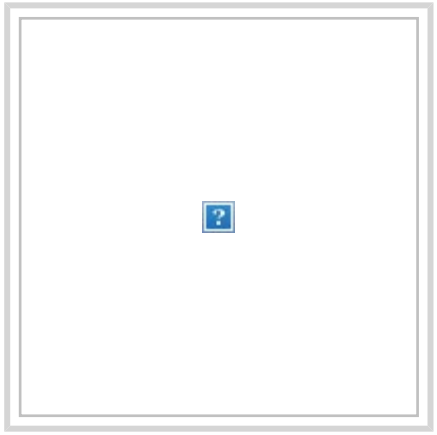
mussel mortality at the concentrations present in Lake Erie during a recent study (2013-15), but mussel growth was lower at sites with greater microcystin concentrations. ...



Read Full Article

Scientists Examined Native Pollinator Exposure Risk to Neonicotinoids in Native Prairie Strips

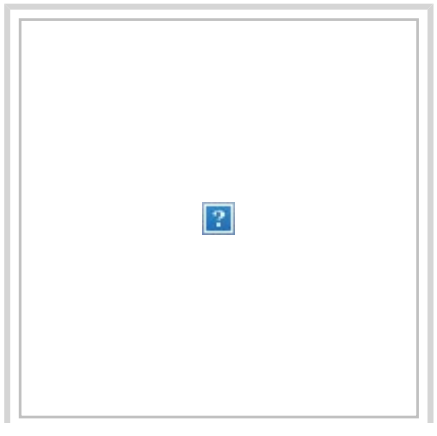
Neonicotinoids were not detected in native prairie plants placed next to agricultural fields several years after discontinuation of neonicotinoid seed treatment. In addition, neonicotinoid concentrations were lower or absent in soils and runoff at sites with the native prairie strips. ...



Read Full Article

Occurrence of Avian Influenza Virus in Groundwater—Study Provides Baseline Data and Informs Future Studies

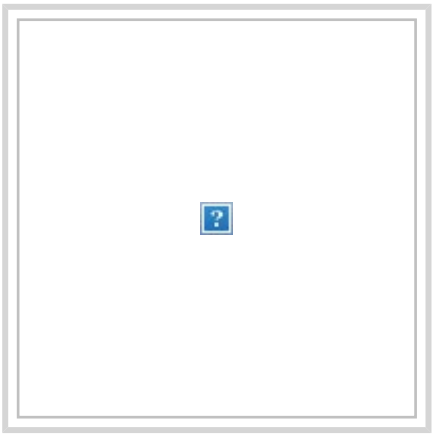
This pilot study provided baseline data on avian influenza virus (AIV) occurrence in groundwater underlying poultry farms and documented the challenges for conducting a



pathogen transport study during a disease outbreak. ...

Read Full Article

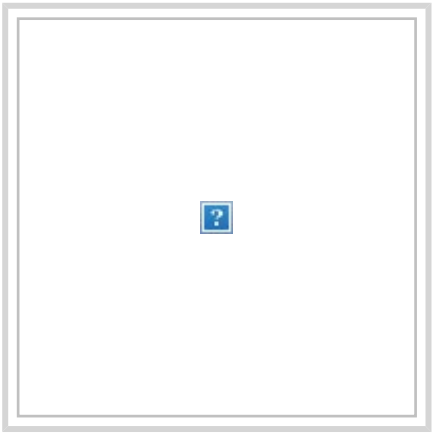
Optimized Approaches Coupled with Interactive Mapping Application Provide a Tool to Visualize the Occurrence of Soil Pathogens



Scientists optimized existing methods to collect and identify microorganisms including *Bacillus anthracis*, a pathogenic microorganism, in 4,800 soil samples across the United States, and developed a geographic information system (GIS)-based application to visualize microorganism occurrence throughout the United States. ...

Read Full Article

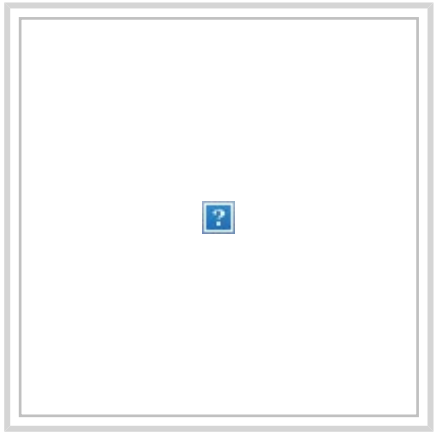
Body Symmetry in Forster's Terns Related to Mercury Exposure



Body symmetry of Forster's terns (*Sterna forsteri*) in San Francisco Bay was related to blood and feather mercury concentrations. Body asymmetry can affect a bird's fitness by reducing flight efficiency, thus increasing energetic costs (especially during migration) and interrupting normal feeding and breeding behaviors. ...

Read Full Article

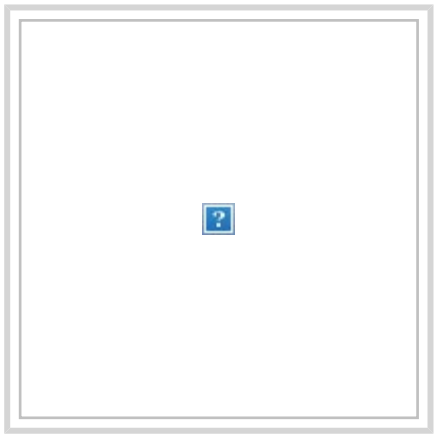
Sources of Contaminants to Congaree National Park—USGS and National Park Service Working Together



A National Park Service (NPS) and U.S. Geological Survey (USGS) study determined the concentrations, potential for degradation, and potential for aquatic and terrestrial animal exposure to organic contaminants in water and sediment within the flood-plain/aquatic environments of Congaree National Park which is located downstream from urban and agricultural areas. ...

Read Full Article

Cyclical Mobilization and Attenuation of Naturally Occurring Arsenic in an Underground Petroleum Plume

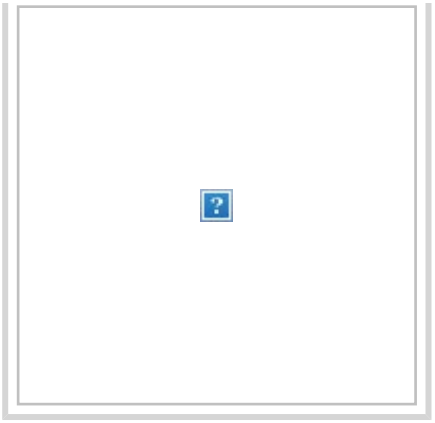


Scientists found that naturally occurring arsenic in aquifer sediments was mobilized into groundwater and attenuated through reattachment to sediments within an underground petroleum plume. Understanding these patterns identifies anthropogenic factors that affect arsenic presence and magnitude in groundwater. ...

Read Full Article

Comparison of Predicted and Measured Pharmaceutical Concentrations in Rivers

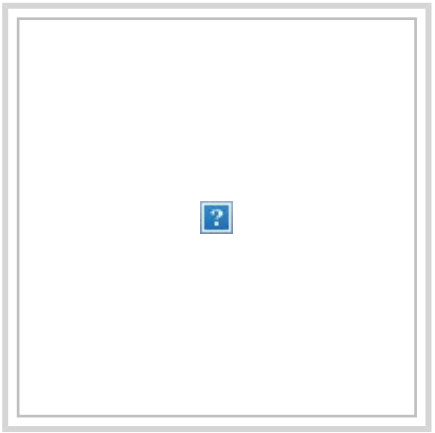
New study evaluated if predicted



environmental concentrations (PECs) of pharmaceuticals (based on pharmaceutical usage data, degree of metabolism in humans, removal in wastewater treatment plants (WWTPs), and environmental dilution), reflect actual measured environmental concentrations (MECs) in two rivers of different sizes and demographics. ...

Read Full Article

Estimated Toxicity to Aquatic Organisms in Midwestern Streams Driven by Relatively Few of the 227 Pesticides Analyzed



USGS scientists measured and estimated potential acute and chronic toxicity for 227 pesticides in agricultural and urban streams in Midwestern United States. Numerous pesticides were detected at low levels. Atrazine, acetochlor, metolachlor, imidacloprid, fipronil, selected organophosphate insecticides, and carbendazim were determined to be major contributors to toxicity that was estimated in over half of the streams studied. ...

Read Full Article

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You are receiving this notification because you have expressed an interest in U.S. Geological Survey (USGS) environmental health related activities.

Our mailing address is:
U.S. Geological Survey
Environmental Health Science
12201 Sunrise Valley Drive, MS 913
Reston, VA 20192

Add us to your address book

Want to change how you receive these emails?
You can update your preferences or unsubscribe from this list

Email List Privacy Statement

FOIA Privacy Policies and Notices

From: Barbara Wainman
To: Greg Sheehan
Subject: Fwd: Proposed Amendments for Interior Bill
Date: Thursday, July 19, 2018 1:16:11 PM
Attachments: FWS Amendments Made in Order with votes.docx

Is what you are proposing consistent with this?

Barbara W. Wainman
Assistant Director, External Affairs
US Fish and Wildlife Service
(202) 208-5256 (office)
(571) 471-4159 (cell)

---------- Forwarded message ---------
From: **Huggler, Matthew** <matthew_huggler@fws.gov>
Date: Thu, Jul 19, 2018 at 2:13 PM
Subject: Fwd: Proposed Amendments for Interior Bill
To: Barbara Wainman <barbara_wainman@fws.gov>

FYI -

Amendment #66 (previously #35): Abraham (R-LA), Westerman (R-AR), Crawford (R-AR), Harris (R-MD)

(Revised) Prevents the enforcement of limitations or prohibitions on the use of genetically modified crops in commercial agricultural operations conducted on National Wildlife Refuges.

Agreed to by voice vote

Matthew C. Huggler
Deputy Assistant Director - External Affairs
U.S. Fish and Wildlife Service
5275 Leesburg Pike, MS: EA
Falls Church, VA 22041-3803
(703) 358-2243 (office)
(202) 460-8402 (cell)

---------- Forwarded message ----------
From: **Nolin, Chris** <chris_nolin@fws.gov>
Date: Thu, Jul 19, 2018 at 9:58 AM
Subject: Fwd: Proposed Amendments for Interior Bill
To: FWS Directorate & Deputies <fwsdirectanddep@fws.gov>

Good morning everyone,

Here are the amendments made in order with the votes from floor consideration of the Interior bill.

FY 2019 House Interior Appropriations Bill
Amendments Made in Order
July 17, 2018

1. **Amendment #2 (previously #151):** Kustoff (R-TN), Comer (R-KY)
    a. (Revised) Reduces and increases by $5,000,000 the amount of funding appropriated to the United States Fish and Wildlife Service Agency Resource Management Program for controlling Invasive Asian Carp in the Mississippi and Ohio River Basins and preventing them from entering and establishing in the inland river systems of Alabama, Kentucky, and Tennessee.
        i. Not offered
2. **Amendment #3 (previously #84):** Soto (D-FL)
    a. Increases funding for the National Wildlife Refuge System by $500,000 for the Wildlife and Habitat Management of invasive species.
        i. Agreed to by voice vote
3. **Amendment #4 (previously #87)**: Lance (R-NJ), Gottheimer (D-NJ)
    a. (Revised) Increases funding for the Delaware River Basin Restoration Program by $1 million.
        i. Agreed to by voice vote
4. **Amendment #48 (previously #70):** Lamborn (R-CO)
    a. Prohibits the use of funds to implement or enforce the threatened species listing of the Preble's meadow jumping mouse under the Endangered Species Act.
        i. Adopted: 213-202
5. **Amendment # 49 (previously #68):** Lamborn (R-CO)
    a. Prohibits the use of funds to implement or enforce the threatened species or endangered species listing of any plant or wildlife that has not undergone a review as required by section 4(c)(2) of the Endangered Species Act of 1973.
        i. Adopted: 213-201
6. **Amendment #54 (previously #168):** Blackburn (R-TN)
    a. Reduces discretionary budget authority by one percent for Fiscal Year 2019 Appropriations for Department of Interior, Environmental Protection Agency, and related agencies.
        i. Not offered
7. **Amendment 55 (previously #71):** Emmer (R-MN), Nolan (D-MN)
    a. Prohibits funding from being used to implement a January 13, 2017 effort by the U.S. Department of Interior and Agriculture to restrict all leasing, exploration, and potential development of approximately 234,328 acres of federal land in Northeast Minnesota.
        i. Amendment withdrawn
8. **Amendment #60 (previously #117):** Pearce (R-NM)
    a. Prevents funds from being used to treat the New Mexico Meadow Jumping Mouse as an endangered species.
        i. Not adopted 206-209
9. **Amendment #62 (previously #118):** Pearce (R-NM), Marshall (R-KS)
    a. (Revised) Prevents funds from being used to carry out any rule-making on the status of the Lesser Prairie Chicken
        i. Adopted 216-199

10. **Amendment #66 (previously #35):** Abraham (R-LA), Westerman (R-AR), Crawford (R-AR), Harris (R-MD)
    a. (Revised) Prevents the enforcement of limitations or prohibitions on the use of genetically modified crops in commercial agricultural operations conducted on National Wildlife Refuges.
        i. Agreed to by voice vote
11. **Amendment #70 (previously #3)**: Smith (R-MO), Gianforte (R-MT)
    a. Prevents the payment of attorney's fees as part of any settlement the Federal Government enters into under the Clean Air Act, the Clean Water Act, and the Endangered Species Act.
        i. Adopted 215-199

Financial Services Appropriations Bill Amendment related to the Service

1. **Amendment #82 (formerly # 21)**: Zeldin (R-NY), DeLauro (D-CT), Rice (D-NY), Souzzi (D-CT), Faso (D-NY)
    a. Prohibits funds from being used by the GSA to market or sell Plum Island, NY.
        i. Agreed to by voice vote

From: Nolin, Chris
To: Greg Sheehan; Stephen Guertin; Jim Kurth; Wainman, Barbara
Subject: Fwd: Proposed Amendments for Interior Bill
Date: Tuesday, July 17, 2018 9:25:46 AM
Attachments: FWS Amendments Made in Order.docx

Good morning,

Here are the FWS amendments made in order. Floor action in the House is expected to begin today.

--
Chris Nolin
Budget Officer
US Fish & Wildlife Service
703-358-2343 desk
240-305-0490 cell
U.S. Fish and Wildlife Service Headquarters
MS: BPHC
5275 Leesburg Pike
Falls Church, VA 22041-3803

FY 2019 House Interior Appropriations Bill
Amendments Made in Order
July 17, 2018

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    a. Prevents the payment of attorney's fees as part of any settlement the Federal Government enters into under the Clean Air Act, the Clean Water Act, and the Endangered Species Act.

From: Michael Oetker
To: Greg Sheehan
Subject: Fwd: Questions for Greg
Date: Wednesday, December 20, 2017 5:00:11 PM
Attachments: ATT00001.htm
R4 Employee Questions for Greg.docx

Greg

Here are a few questions that we have received from the field stations in advance of tomorrow. We can talk in the morning if you need any additional information?

Mike

Begin forwarded message:

> **From:** "Farmer, Kristi" <kristi_farmer@fws.gov>
> **Date:** December 20, 2017 at 4:25:38 PM EST
> **To:** Mike Oetker <michael_oetker@fws.gov>
> **Subject: Questions for Greg**
>
> Here are the questions by program we have received so far from employees for Greg. Thanks.
>
> --
> Kristi Watkins Farmer
> Chief of Staff
> U.S. Fish and Wildlife Service
> Southeast Region - Atlanta, Georgia
> 404-679-7275

Questions for Greg Sheehan from Employees in the Southeast Region
December 21, 2017

Ecological Services:

- Concerning the DOI Workplace Environment Study Reports, Secretary Zinke spoke about the need for a cultural change within DOI and that each bureau head has been asked to develop an action plan for stopping harassment and ensuring that resources are available for every employee. Can management and staff expect to be receiving soon some type of training and or next steps toward this change and what do you think that will look like? Also, will there be a component to this plan that trains employees of the Fish and Wildlife Service on self-awareness in these areas?

Office of Law Enforcement:

- I wanted to bring to your attention that significant quantities of migratory songbirds are being taken/captured/bartered/traded and sold to the detriment of those species. Intricate trapping devices consisting of mist nets, lime sticks and manufactured bird traps with trap doors and built in compartments designed to hold bait/call birds are increasingly being deployed throughout the U.S in support of an illegal expanding black market trade. To make things worse, the traps themselves are legal. These traps are so prized for their effectiveness that they are regularly being imported via airline passenger baggage and sold in area pet shops and via social media. These traps undermine a century of conservation efforts throughout the United States and the Migratory Bird Treaty Act itself. The traps are extremely effective and indiscriminate. Is there anything that can be done to prohibit the possession, use, manufacture, sale, import or export such devices or perhaps without a permit?

  Is the office of the Principal Deputy Director willing to take on such an effort for the benefit of protecting trust Federal species? Previously emergency prohibitions have been enacted regarding the ivory trade and other non-native species. With this being the centennial anniversary of the Migratory Bird Treaty Act, I cannot think of a more just timing to move forward to enabling such a provision. Your thoughts? Thank you for your time.

National Wildlife Refuge System:

- In July 2014, the FWS banned Genetically Modified Crops (GMCs) on National Wildlife Refuges. GMC's are used throughout the world as major food sources of human populations. The majority of scientific papers have shown little to no impacts to this point in time. In effect, this decision has resulted in cooperative farmers having to use harsher chemicals to control weeds and insects on crops on refuge lands which is actually worse on wildlife and the land. Also, the decision has decreased yields significantly and the 20-25% refuge share kept in the field typically for waterfowl has been reduced and impacting especially in the Southeast the ability to meet Duck Energy Day Goals outlined in the North American Waterfowl Plan. Is there any consideration to the FWS reviewing the above action?

Science Applications:

- What is your vision for collaborative conservation?

- What is your plan for the LCC program, for Science Apps, and when will this direction be provided to the field?

- What do you feel are the most important and easiest changes that FWS needs to implement to be successful?

Wildlife and Sportfish Restoration:

- Can Director Sheehan provide any update on the frequently reported-on interest in moving the FWS HQ office away from the national capital area?

From:	Randolph, Nikki
To:	Morris, Charisa; Stephen Guertin; Jim Kurth
Subject:	EXSEC Overdue Report
Date:	Monday, September 17, 2018 8:53:58 AM
Attachments:	Sept 17 EXSEC overdue.rtf

Charisa,

here you go... Before 10 AM as promised. LOL

I can't figure out how to attach this to your report

--
Nikki S. Randolph
Chief, CCU
U.S. Fish and Wildlife Service
202-208-7535

> *"There cannot be a crisis next week. My schedule is already full"* -- *Henry Kissinger*

FISH AND WILDLIFE SERVICE
EXSEC OVER DUE LIST

Date: 09/17/2018

DCN	Es No	Subject	Asgnd Date	ES Due	DCN Due	Sig	Asgnd To	Task	Addressee
		OVER DUE							
Nonresponsive Records	[redacted]	[redacted]	[redacted]		[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
068320	008654	Ban on use of genetically modified (GMO) seed by commercial agriculture on national wildlife refuges	09/17/2018	07/02/2018	07/02/2018	A/S	AEA	See Comments	Abraham **(LOST PACKAGE AEA needs to recreate or find package and return to Directors office)**
Nonresponsive Records	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

FISH AND WILDLIFE SERVICE
EXSEC OVER DUE LIST

Date: 09/17/2018

From:	Barbara Wainman
To:	Kashyap Patel; Greg Sheehan; Jim Kurth; Steve Guertin
Subject:	Fwd: Daily Letter Report for FWP
Date:	Friday, June 8, 2018 10:41:54 AM
Attachments:	FWS Congressional Correspondence Tracker_6-8-18.docx

---

I will send this to Maureen but she is not around today who else should I send it to

Barbara W. Wainman
Assistant Director, External Affairs
US Fish and Wildlife Service
(202) 208-5256 (office)
(571) 471-4159 (cell)

---------- Forwarded message ---------
From: Jones, Lisa <lisa_m_jones@fws.gov>
Date: Fri, Jun 8, 2018 at 11:36 AM
Subject: Daily Letter Report for FWP
To: Barbara Wainman <barbara_wainman@fws.gov>
Cc: Martin Kodis <martin_kodis@fws.gov>, Angela Gustavson <angela_gustavson@fws.gov>

Barbara,

Attached is an updated letter report with the changes we discussed. I also added in another column for the date the letter was actually loaded into DTS, in addition to the date of the letter, as those can be dramatically far apart and I thought it was important for FWP to see that.

Let me know if you'd like to to change anything.

Lisa

Lisa Hummon-Jones
Congressional and Legislative Affairs Specialist
U.S. Fish and Wildlife Service
703-358-2536 (o)
202-365-7255 (c)

U.S. Fish and Wildlife Service Office of Congressional and Legislative Affairs
Status of Congressional Correspondence

June 8, 2018

Code

Above This Line = Overdue
With FWS

DCN	Package Title	From (lead office)	To	Letter Date	Date Loaded into DTS	Date Due	Status
Nonresponsive Records							

DCN	Package Title	From (lead office)	To	Letter Date	Date Loaded into DTS	Date Due	Status
Nonresponsive Records	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

DCN	Package Title	From (lead office)	To	Letter Date	Date Loaded into DTS	Date Due	Status
Nonresponsive Records	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
NA	Letter on GMO policy on NWRs	Abraham	Sec. Zinke	5/8/18	NA	NA	Not in DTS as of 6/4/18
Nonresponsive Records	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

From: Barbara Wainman
To: Kashyap Patel; Greg Sheehan; Jim Kurth; Steve Guertin
Subject: Fwd: Daily Letter Report for FWP
Date: Friday, June 8, 2018 10:45:45 AM
Attachments: FWS Congressional Correspondence Tracker_6-8-18.docx

---

Use this one sorry.

Barbara W. Wainman
Assistant Director, External Affairs
US Fish and Wildlife Service
(202) 208-5256 (office)
(571) 471-4159 (cell)

---------- Forwarded message ---------
From: Jones, Lisa <lisa_m_jones@fws.gov>
Date: Fri, Jun 8, 2018 at 11:44 AM
Subject: Re: Daily Letter Report for FWP
To: Barbara Wainman <barbara_wainman@fws.gov>
Cc: Martin Kodis <martin_kodis@fws.gov>, Angela Gustavson <angela_gustavson@fws.gov>

Actually, use this one. I realized one of the packages was slightly out of order. I organized them by letter date.

Lisa

Lisa Hummon-Jones
Congressional and Legislative Affairs Specialist
U.S. Fish and Wildlife Service
703-358-2536 (o)
202-365-7255 (c)

On Fri, Jun 8, 2018 at 11:40 AM, Barbara Wainman <barbara_wainman@fws.gov> wrote:

> Thanks guys!
>
> Barbara W. Wainman
> Assistant Director, External Affairs
> US Fish and Wildlife Service
> (202) 208-5256 (office)

(571) 471-4159 (cell)

On Fri, Jun 8, 2018 at 11:36 AM Jones, Lisa <lisa_m_jones@fws.gov> wrote:

> Barbara,
>
> Attached is an updated letter report with the changes we discussed. I also added in another column for the date the letter was actually loaded into DTS, in addition to the date of the letter, as those can be dramatically far apart and I thought it was important for FWP to see that.
>
> Let me know if you'd like to to change anything.
>
> Lisa
>
> ---
> Lisa Hummon-Jones
> Congressional and Legislative Affairs Specialist
> U.S. Fish and Wildlife Service
> 703-358-2536 (o)
> 202-365-7255 (c)

U.S. Fish and Wildlife Service Office of Congressional and Legislative Affairs
Status of Congressional Correspondence

June 8, 2018

Code

Above This Line = Overdue
With FWS

DCN	Package Title	From (lead office)	To	Letter Date	Date Loaded into DTS	Date Due	Status
Nonresponsive Records							

DCN	Package Title	From (lead office)	To	Letter Date	Date Loaded into DTS	Date Due	Status
Nonresponsive Records							
							trol Unit since 6/7/18.

DCN	Package Title	From (lead office)	To	Letter Date	Date Loaded into DTS	Date Due	Status
Nonresponsive Records	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
NA	Letter on GMO policy on NWRs	Abraham	Sec. Zinke	5/8/18	NA	NA	Not in DTS as of 6/4/18
Nonresponsive Records	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

From:	Morris, Charisa
To:	Greg Sheehan
Subject:	Autopen request (multiple)
Date:	Thursday, December 21, 2017 12:33:38 PM
Attachments:	EST6024 American Bird Conservancy (1).docx 065454 Murphy.docx Decision memo_FWS FY2017 State Foreign Ops Spend Plan $9.15M 12-20-17 Final V2.docx

Hi Greg!

I hope your day is going GREAT! Can you take a look at the following attachments and let me know if these are okay to move forward with your autopenned signature?

Thanks!

Packages:

- EST6024: Congressional (orange) - Rebuttal to letter on Wildlife Refuges from Information and Innovation Foundation re: limited ag use within refuges. *Though the signatory on this version is Jason, it could also be you (it will be up to FWP to delegate authority or not).*
- Nonresponsive Records [redacted]
- Nonresponsive Records [redacted]

Also, how are you coming along on the foreign travel spreadsheet? We have Tim Mayer (R1) scheduled to travel to Laos on January 5, so would LOVE to get this moving today for approval to FWP.

--

Charisa_Morris@fws.gov | Chief of Staff, Office of the Director | U.S. Fish & Wildlife Service | 1849 C Street NW, Room 3348 | Washington, DC 20240 | (202) 208-3843 | For urgent matters, please dial cell: 301-875-8937

(b) (5) DPP

[redacted]

Nonresponsive Records

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Nonresponsive Records

From: gregory_sheehan@fws.gov on behalf of Sheehan, Greg
To: Jim Kurth
Subject: GMO"s
Date: Friday, February 2, 2018 12:26:47 PM

Jim

Aurelia came over late yesterday to discuss GMO's and express her concerns. She has been in some conversations with some farmers in Mississippi that I believe farm on our refuge(s). Not certain. I committed that she could have the same presentation that I received on the GMO issue from the solicitors. Could you please set that up and attend. I don't need to be in attendance.

Thanks
Greg

--
Greg Sheehan
Principal Deputy Director
US Fish and Wildlife Service
1849 C Street NW, Room 3358
Washington, DC 20240
Office 202-208-4545
Cell 202-676-7675

From:	Huggler, Matthew
To:	Greg Sheehan
Cc:	Barbara Wainman; Doug Hobbs
Subject:	Conservation Achievements Update
Date:	Wednesday, August 8, 2018 10:38:39 AM
Attachments:	FWS Conservation Achievements v9.docx

Greg,

Ben Cassidy recently asked us to update our list of conservation achievements. Attached is our initial cut. New or updated information is in red.

We may still add a few items, but we wanted to give you time to review and let us know if there is anything we missed our should cut.

Once we get the document finalized we will put it into a nicer format and provide to Ben by his due date of COB today.

Thanks,

- Matt

Matthew C. Huggler
Deputy Assistant Director - External Affairs
U.S. Fish and Wildlife Service
5275 Leesburg Pike, MS: EA
Falls Church, VA 22041-3803
(703) 358-2243 (office)
(202) 460-8402 (cell)

U.S. Fish & Wildlife Service (FWS)
Conservation Achievements
January 2017 – August 2018

[Note – new items/changes in bold red]

Outdoor Recreation and Public Access

- Appointed 12 staff across the country to work full time on increasing hunting and fishing access and reducing or eliminating unnecessary regulations.
- **All hunting and fishing regulations on FWS lands are being reviewed with the goal of better aligning them with state regulations. To date, 153 hunting and fishing assessments on National Wildlife Refuges are complete. Additional assessments will be completed weekly. These assessments are identifying opportunities for new and expanding existing hunting and fishing opportunities.**
- Focusing on making information on hunting, fishing and outdoor recreation on public lands more accessible to the public, while supporting state's recruiting, retention, and reactivation efforts. **FWS has launched hunting and fishing web pages with interactive maps, links to state licensing information, stories on hunting and fishing, and information on duck stamps.**
- Announced a $60 million cooperative agreement with the Recreational Boating and Fishing Foundation to help retain and recruit recreational anglers and boaters.
- Working with the private sector and states to pilot a network of eight Outdoor Skills Centers that will focus on improving R3 efforts. **FWS hosted a joint R3 workshop in June 2018 for states and FWS employees to provide training to R3 coordinators and review state R3 plans.** Most FWS regions now have staff assigned to R3 efforts.
- **Proposed to open more than 251,000 acres to new or expanded hunting and fishing opportunities at 30 national wildlife refuges. This will bring the number of units of the Refuge System where the public may hunt to 377, and the number where fishing would be permitted to 312.**
- The newly established International Wildlife Conservation Council (IWCC) will provide expertise and advice on international conservation issues. IWCC's first meeting was in March, and **it met again in June to discuss African country perspectives on the relationship between hunting and conservation.**
- Hosted the Sport Fishing and Boating Partnership Council Meeting to discuss new policy and priorities for recreation and access under Secretary Zinke.
- The National Fish Hatchery System released over 292 million sportfish species, which provide recreational angling opportunities while contributing to species restoration and recovery goals.
- For the first time, revised the Federal Migratory Bird Hunting and Conservation Stamp regulations to more prominently feature the contribution of hunters to conservation. The 2018 Duck Stamp features a hunting theme to celebrate the contributions of hunters in acquiring over $1 Billion since 1934 to conserve waterfowl habitat, a primary reason populations are at all-time highs.
- **Hosted the inaugural meeting of the Hunting and Shooting Sports Conservation Council which will provide advice on integrating hunting and shooting sports considerations into FWS operations.**
- **FWS appointed a team of 30 recreation, permit, grants and accessibility technical specialists spanning five internal program areas to coordinate implementation of Secretarial Order 3366 on recreation.**
- **Provided 35 recommendations to the Secretary to increase recreational access and opportunities for the public on FWS-managed lands and waters. Some of the recommendations build on actions currently underway in support of Secretarial Order 3356, while others propose developing new recreational program elements.**

- **The Lahontan National Fish Hatchery Complex is working alongside federal, state and local partners and tribes to restore populations of Lahontan Cutthroat trout in the Truckee River Basin. These fish – once thought to be extinct – are now providing great sport fishing to anglers and adding to the region's recreational economies.**

Habitat Conservation

- Using voluntary partnerships under the Partners for Fish and Wildlife program and the Coastal program, FWS enhanced or restored **406 river miles, over 303,057 upland acres and over 41,290 wetland acres.**
- Working with state and federal partners to help implement the recent Secretarial Order 3362 to prioritize and conserve western big game corridors. FWS also recently **announced a new position of Senior Advisor to the Director for Western States** to enhance and improve the quality of big game winter range and migration corridors on FWS managed lands.
- Since 2017, the National Fish Passage Program has removed 133 barriers opening over 5,500 river miles and 4,682 wetland acres for native fish. Projects were conducted in over 27 states and in partnership with more than 100 partners including state agencies.
- Conducted approximately 400 risk assessments to evaluate potentially invasive species. These assessments provide the public, industry, and State and Federal decision makers with valuable information to better prioritize and manage the greatest threats of invasive species.
- Allowed grazers to use the Charles M. Russell National Wildlife Refuge in Montana during the catastrophic fire season of 2017.

Species Management and Conservation

- Issued a policy to ensure that state wildlife professionals are involved in all species status assessments contemplated under ESA determinations.
- Since January 2017, recovered a number of species under the ESA, including proposed delistings for Monito gecko, Kirtland's Warbler, Black-Capped Vireo, Foskett Speckled Dace, **Colorado Butterfly Plant, Hidden Lake bluecurls, (now final) and** Eureka Valley evening-primrose (now final), as well as proposed downlistings of the Humpback chub, Nene (Hawaiian Goose), Tobusch fishhook cactus (now final), and Eureka dune grass (now final).
- Delisted and reaffirmed a final rule to delist the Greater Yellowstone Ecosystem population of Grizzly Bears under the ESA.
- Secretary announced plans to restore Grizzly Bears on the Northern Cascades Ecosystem.
- Announced that the Canada lynx may no longer warrant protection under the ESA and should be considered for delisting due to recovery. This recommendation is the result of almost 20 years of partnerships with state, federal, tribal, industry and other land managers across a large landscape.
- Due to the efforts of two FWS employees who stayed on site, about 240 Puerto Rican endangered parrots weathered Hurricane Maria when it struck the island last fall. Most of them stayed in a reinforced-concrete building at an aviary owned and operated by FWS. The majority of parrots were saved.
- Helping to finalize the development of a safe, effective, and economical sylvatic plague vaccine to protect prairie dogs in identified management areas is part of a multi-partner collaboration between FWS, USGS, USDA-APHIS, and Colorado Parks and Wildlife to increase populations of endangered black-footed ferrets (BFFs). The species is entirely dependent upon prairie dogs for survival, so efforts to protect prairie dogs are designed to bolster BFF numbers in an effort to recover the species and return management to states.
- For the first time in nearly 40 years, endangered California condors roosted on Blue Ridge National Wildlife Refuge in the southern Sierra Nevada Mountains foothills in 2017. This is a milestone as the wild population grows the birds are expanding into their former range, which once included the entire West Coast from Canada to Northern Mexico.

- As a result of integrated efforts by FWS and its partners including sea lamprey control, hatchery culture and stocking, restoration of aquatic connectivity, assessment and applied research, landlocked Atlantic salmon naturally reproduced in tributaries to the Lake Champlain Basin for the first time since early 1800s.
- **Issued national guidance clarifying when an Incidental Take Permit is required under Section 10 of the ESA. The guidance clarified than an ITP is only needed when an activity is likely to result in the take of listed wildlife and it is up to an applicant's discretion whether to apply for a permit or not.**
- **FWS proposed to replace existing regulations governing the nonessential experimental population of the red wolf under section 10j of the ESA. If finalized, the action would further conservation of the red wolf by enhancing support for captive populations.**
- **In June, FWS hosted a meeting with other federal agency representatives to discuss implementation of the M-Opinion to ensure consistency in application of the Migratory Bird Treaty Act across federal agencies.**
- **In July, FWS and NOAA Fisheries jointly proposed revisions to certain regulations under the ESA to ensure clarity and consistency. This continues the bureaus' efforts to improve how the ESA is implemented.**
- **A 2014 memo prohibiting the use of Genetically Modified Organism (GMO) crop seeds and restricting the use of neonicotinoid pesticides was withdrawn in order to provide more latitude to refuge managers to work adaptively and make field level decisions about the best manner to fulfill the purposes of a refuge.**
- **Working with law enforcement counterparts from over 90 countries, FWS OLE participated in a global wildlife enforcement operation. The exercise highlighted how the FWS works to protect our nation's border and native resources, combats transnational organized crime, and collaborates with federal, state, and international law enforcement counterparts. In the U.S., examples of successful wildlife interdictions include 3,800 crocodilian skins, 1,030 live reptiles, and 1,796 partial sea turtle carapaces.**

Conservation Funding

- Since February 2017, FWS has awarded more than $2.3 billion in grants through Pittman-Robertson and Dingell-Johnson act funds and State Wildlife Grant funds to states for improving access and fish and wildlife conservation.
- Over $114 million has been approved for 99 NAWCA grants affecting over 580,000 acres in the U.S., Canada, and Mexico since January 2017. These funds will be matched by almost $245 million from project partners.
- FWS announced $14 million in Boating Infrastructure Grants which support water-related outdoor recreation and tourism by improving facilities for large transient recreational boats across the country.
- **To support work under Secretarial Order 3362 on migration corridors, FWS set aside $3 million to address state research needs and $2 million to support habitat management activities. Of the latter amount, $500,000 will support a Migration Corridor grant program managed by NFWF.**
- **Distributed $2 million under the State and Interstate Aquatic Nuisance Species (ANS) Management Plan Grant Program. 44 State and Interstate ANS plans have been approved to date.**
- **FWS will soon announce $3.8 million in grants to benefit migratory birds through the Neotropical Migratory Bird Conservation Act for 28 collaborative conservation projects in 16 countries across the Americas. The NMBCA grants will leverage $14.2 million in additional partner funds.**

From: Morris_Charisa
To: Greg Sheehan; Kashyap Patel; Matthew Huggler
Subject: Fwd: GMO in Service Manual
Date: Wednesday, July 25, 2018 2:45:55 PM

Hi there, GMO memo team:

Please see Nancy's important points below. I am signing off in 30 minutes.

Have a great rest of your July!
Charisa

---------- Forwarded message ----------
From: **Nancy Brown-Kobil** <nancy.brown-kobil@sol.doi.gov>
Date: Wed, Jul 25, 2018 at 2:18 PM
Subject: Re: GMO in Service Manual
To: Charisa Morris <charisa_morris@fws.gov>
Cc: "Jesup, Benjamin" <benjamin.jesup@sol.doi.gov>, "Romanik, Peg" <peg.romanik@sol.doi.gov>, kashyap_patel@fws.gov, Matthew_Huggler@fws.gov

Charisa-

I spoke with Peg and I just want to point out to you the questions that I still have in my draft and Peg's email to Greg (i.e ,(b) (5) ACP [redacted])?

Please make sure Greg answers those as well. Thanks!

Nancy Brown-Kobil
Attorney-Advisor, Office of the Solicitor
U.S. Department of the Interior
1849 C Street, NW, MS-6327
Washington, D.C. 20240
202.208.6479
Nancy.Brown-Kobil@sol.doi.gov

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On Wed, Jul 25, 2018 at 12:49 PM Morris, Charisa <charisa_morris@fws.gov> wrote:
> + Peg, Matt, and Kashyap
>
> It sounds like Greg already has a draft of the memo, which is great news. We can still take a few minutes to touch base today to cover any perceived challenges or options. We reported to Bernhardt yesterday afternoon that this memo will likely go out by the end of the week, so it will be great to confirm that we all see a way that can happen.
>
> Thanks!
> Charisa
>
> On Tue, Jul 24, 2018 at 5:01 PM, Morris, Charisa <charisa_morris@fws.gov> wrote:
> > Done.
> >
> > See you tomorrow!
> >
> > On Tue, Jul 24, 2018 at 4:24 PM, Jesup, Benjamin <benjamin.jesup@sol.doi.gov> wrote:
> > > If Peg is going you probably don't need me, but I am busy from 1:30 to 4:30. (I could do 1:00.)
> > >
> > > Ben
> > >
> > > On Tue, Jul 24, 2018 at 3:53 PM, Nancy Brown-Kobil <nancy.brown-kobil@sol.doi.gov> wrote:
> > > > Let's meet in my office (6327). Peg Romanik may join us if she's available. Ben, would you like to as well (1:30 Wed.)? If so, we can move to Peg's office down the hall.
> > > >
> > > > Nancy Brown-Kobil
> > > > Attorney-Advisor, Office of the Solicitor
> > > > U.S. Department of the Interior
> > > > 1849 C Street, NW, MS-6327
> > > > Washington, D.C. 20240
> > > > 202 208.6479
> > > > Nancy.Brown-Kobil@sol.doi.gov

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On Tue, Jul 24, 2018 at 3:49 PM Morris, Charisa <charisa_morris@fws.gov> wrote:

Great - just sent the invite. My place or yours?

On Tue, Jul 24, 2018 at 2:58 PM, Nancy Brown-Kobil <nancy.brown-kobil@sol.doi.gov> wrote:

That time works for me. Speak to you then!

Nancy Brown-Kobil
Attorney-Advisor
Division of Parks and Wildlife
Office of the Solicitor
202.208.6479

On: 24 July 2018 14:55,
"Morris, Charisa" <charisa_morris@fws.gov> wrote:

Great advice, and I'd love to chat tomorrow - do you want to meet around 1:30?

On Tue, Jul 24, 2018 at 2:51 PM, Nancy Brown-Kobil <nancy.brown-kobil@sol.doi.gov> wrote:

ATTORNEY CLIENT PRIVILEGED COMMUNICATION. DO NOT DISTRIBUTE/FOIA EXEMPT.

Hi Charisa-

Sure I can discuss the GMO memo further if you'd like. Right now my draft is being reviewed by my management and then will be forwarded to Greg.

(b) (5) ACP [redacted]

I'm in the office tomorrow if you want to touch base in person.

Nancy Brown-Kobil
Attorney-Advisor, Office of the Solicitor
U.S. Department of the Interior
1849 C Street, NW, MS-6327
Washington, D.C. 20240
202.208.6479
Nancy.Brown-Kobil@sol.doi.gov

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On Tue, Jul 24, 2018 at 2:15 PM Morris, Charisa <charisa_morris@fws.gov> wrote:

Hi Nancy!

Do you have a moment to touch base on the GMO memo today? It will only take a second.

Thanks,
Charisa

---------- Forwarded message ----------
From: **Sheehan, Greg** <greg_j_sheehan@fws.gov>
Date: Tue, Jul 24, 2018 at 11:15 AM

Subject: Re: GMO in Service Manual
To: "Morris, Charisa" <charisa_morris@fws.gov>

Please work with Nancy at SOL to get the new language into the memo and following manual followup. I have revised the language as stated below for the service manual. Will be glad to discuss.

"Genetically modified organisms (GMO's), including plant seed, may be used in the refuge management system provided we determine their use is essential to accomplishing refuge purpose(s) as demonstrated by through completion of appropriate NEPA processes."

Thanks
Greg

On Mon, Jul 23, 2018 at 2:22 PM, Morris, Charisa <charisa_morris@fws.gov> wrote:

> The most relevant return I found is attached and below. I did not find any amendments after the July 2014 memo came out. I did not get any returns on the term "neonicotinoid." I currently have an official inquiry into the person who manages the manual, so should have a definitive answer as soon as tomorrow.
>
> **Amendment 1, 601 FW 3**
> **(Delegation of Authority for Genetically Modified Crops)**
>
> | |
> |---|
> | **Series** Refuge Management |
> | **Part 601** National Wildlife Refuge System |
> | **Chapter 3** Biological Integrity, Diversity, and Environmental Health |
> | **Amendment Number** 1 |
> | **Purpose** This amendment delegates authority to the Regional Chiefs for the National Wildlife Refuge System, to approve the use of genetically modified crops (GMCs) on National Wildlife Refuge System lands. |
>
> **Action**
>
> **Under 3.15C, change the last sentence in the paragraph**:
>
> "We do not use genetically modified organisms in refuge management unless we determine their use is essential to accomplishing refuge purpose(s) and the Director approves the use."
>
> **to**
>
> "We do not use genetically modified organisms in refuge management unless we determine their use is essential to accomplishing refuge purpose(s) and the Regional Chief, National Wildlife Refuge System, approves the use.
>
> **Also add the following subsections to the same paragraph**
>
> **(1)** This delegation covers agricultural crops only. For genetically modified organisms other than GMCs, such as trees or fish, Director approval is required.
>
> **(2)** A request for approval can cover just one refuge, or it can cover multiple units within a refuge complex.
>
> --
> Charisa_Morris@fws.gov | Chief of Staff, Office of the Director | U.S. Fish & Wildlife Service | 1849 C Street NW, Room 3348 | Washington, DC 20240 | (202) 208-3843 | For urgent matters, please dial cell: 301-875-8937

--
Greg Sheehan
Principal Deputy Director
US Fish and Wildlife Service
1849 C Street NW, Room 3358
Washington, DC 20240
Office 202-208-4545
Cell 202-676-7675

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Ben Jesup
Assistant Solicitor for Fish and Wildlife
Solicitor's Office
Department of the Interior
202-208-3170

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From:	Greg Sheehan
To:	(b) (6) [redacted]; Greg Sheehan Cell Principal Deputy Director
Subject:	Fwd: Revised FWS Conservation Accomplishments
Date:	Sunday, August 12, 2018 11:24:29 PM
Attachments:	ATT00001.htm 2018 Jan Aug Conservation Achievements Aug 10 2018 Final.pdf

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Greg Sheehan
Principal Deputy Director
US Fish and Wildlife Service
202-208-4545 office
202-676-7675 cell

Begin forwarded message:

From: Doug Hobbs <doug_hobbs@fws.gov>
Date: August 10, 2018 at 1:17:38 PM CDT
To: Greg Sheehan <greg_j_sheehan@fws.gov>, Benjamin Cassidy <benjamin_cassidy@ios.doi.gov>
Cc: Barbara Wainman <barbara_wainman@fws.gov>, Matthew Huggler <matthew_huggler@fws.gov>
Subject: Revised FWS Conservation Accomplishments

Happy Friday, everyone. I am sending the revised final report, January to August 2018. Please note the updated first bullet. Let me know if you need anything else.

Have a great weekend.

--
Douglas Hobbs
Chief, Division of Partners and Intergovernmental Affairs
External Affairs
U.S. Fish & Wildlife Service
5275 Leesburg Pike
Mailstop: EA
Falls Church, VA 22041-3803
email: doug_hobbs@fws.gov
(Office) 703-358-2336
(Mobile) 202-413-7107

U.S. Fish & Wildlife Service (FWS) Conservation Achievement Highlights

January 2017 – August 2018

Outdoor Recreation and Public Access

USFWS

■ The FWS will soon finalize a rule to open more than 251,000 acres to new or expanded hunting and fishing opportunities at 30 national wildlife refuges. In combination with the 130,000 acres opened on 10 Refuges in 2017, a total of 381,000 acres have opened or expanded to hunting and fishing since January 2017. This will bring the number of units of the Refuge System where the public may hunt to 377, and the number where fishing is permitted, to 312.

■ Appointed 12 staff across the country to work full time on increasing hunting and fishing access and reducing or eliminating unnecessary regulations.

■ All hunting and fishing regulations on FWS lands are being reviewed with the goal of better aligning them with state regulations. To date, 153 hunting and fishing assessments on refuges are complete. The purpose of the assessments is to identify opportunities for new and expanding existing hunting and fishing opportunities.This alignment will result in numerous expanded season dates, methods of harvest and bag/creel limits for existing opportunities. More than 2,100 lines of regulation revisions are expected in 2018.

■ In order to make information on hunting, fishing and outdoor recreation on public lands more accessible to the public, while supporting state's recruiting, retention, and reactivation efforts, FWS has launched web pages with interactive maps, links to state licensing information, stories on hunting and fishing, and information on duck stamps.

■ Announced a $60 million cooperative agreement with the Recreational Boating and Fishing Foundation to help retain and recruit recreational anglers and boaters.

■ Working with the private sector and states to pilot a network of eight Outdoor Skills Centers that will focus on improving Recruitment, Retention and Reavtivation (R3)efforts. FWS also hosted a joint workshop in June 2018 for states and FWS employees to provide training to R3 coordinators and review state R3 plans.

■ The newly established International Wildlife Conservation Council (IWCC) will provide expertise and advice on international conservation issues. IWCC's first meeting was in March, and it met again in June to discuss African country perspectives on the relationship between hunting and conservation.

■ Hosted the Sport Fishing and Boating Partnership Council Meeting to discuss new policy and priorities for recreation and access under Secretary Zinke.

USFWS

■ The National Fish Hatchery System released over 292 million sportfish species, which provide recreational angling opportunities while contributing to species restoration and recovery goals. For example:

■ The Lahontan National Fish Hatchery Complex is working alongside federal, state and local partners and tribes to restore populations of Lahontan Cutthroat trout in the Truckee River Basin. These fish – once thought to be extinct – are now providing sport fishing to anglers and adding to the region's recreational economies.

■ Garrison Dam and Valley City National Fish Hatcheries, both located in North Dakota, just finished up a record walleye production season with over 10 million walleye fingerlings and 4 million fry stocked across waters in five Midwest states.

■ For the first time, revised the Federal Migratory Bird Hunting and Conservation Stamp regulations to more prominently feature the contribution of hunters to conservation. The 2018 Duck Stamp features a hunting theme to celebrate the contributions of hunters in acquiring over $1 Billion since 1934 to conserve waterfowl habitat, a primary reason populations are at all-time highs.

■ Hosted the inaugural meeting of the Hunting and Shooting Sports Conservation Council which will provide advice on integrating hunting and shooting sports considerations into FWS operations.

■ Provided 35 recommendations to the Secretary to increase recreational access and opportunities for the public on FWS-managed lands and waters. Some of the recommendations build on actions currently underway in support of Secretarial Order 3356, while others propose developing new recreational program elements.

■ FWS appointed a team of 30 recreation, permit, grants and accessibility technical specialists spanning five internal program areas to coordinate implementation of Secretarial Order 3366 on recreation.


USFWS

Habitat Conservation

■ Using voluntary partnerships under the Partners for Fish and Wildlife program and the Coastal program, FWS enhanced or restored 406 river miles, over 303,057 upland acres and over 41,290 wetland acres.

■ Recently announced a new position of Senior Advisor to the Director for Western States to enhance and improve the quality of big game winter range and migration corridors on FWS managed lands. FWS is also working with state and federal partners to help implement the recent Secretarial Order 3362 to prioritize and conserve western big game corridors.

■ Since 2017, the National Fish Passage Program has removed 133 barriers opening over 5,500 river miles and 4,682 wetland acres for native fish. Projects were conducted in over 27 states and in partnership with more than 100 partners including state agencies.

■ FWS conducted approximately 400 risk assessments across the country to evaluate potentially invasive species. These assessments provide the public, industry, and State and Federal decision makers with valuable information to better prioritize and manage the greatest threats of invasive species.

■ A 2014 memo prohibiting the use of Genetically Modified Organism (GMO) crop seeds and restricting the use of neonicotinoid pesticides was withdrawn in order to provide more latitude to refuge managers to work adaptively and make field level decisions about the best manner to fulfill the purposes of a refuge.

■ The North American Wetlands Conservation Council recently recommended 24 grants to conserve 134,685 acres of wetland habitat for waterfowl and other wetland migratory birds. Partners, including states, conservation organizations, and others, will provide more than $60,500,000 to match almost $24,000,000 in grant funds. The projects will be presented to the Migratory Bird Conservation Commission for final approval in September.

■ In 2018, FWS has conserved 84,629 acres of priority wetlands and grasslands in the Prairie Pothole Region using voluntary conservation easements. FWS works with landowners to protect these critical habitats that support waterfowl populations and recreational opportunities.

Species Management and Conservation

■ Since January 2017, recovered a number of species under the ESA, including proposed delistings for Monito gecko, Kirtland's Warbler, Black-Capped Vireo, Foskett Speckled Dace, Colorado Butterfly Plant, Hidden Lake bluecurls, (now final) and Eureka Valley evening-primrose (now final), as well as proposed downlistings of the Humpback chub, Nene (Hawaiian Goose), Tobusch fishhook cactus (now final), and Eureka dune grass (now final).

■ Delisted and reaffirmed a final rule to delist the Greater Yellowstone Ecosystem population of Grizzly Bears under the ESA.

■ Issued a policy to ensure that state wildlife professionals are involved in all species status assessments contemplated under ESA determinations.

■ Secretary announced plans to restore Grizzly Bears on the Northern Cascades Ecosystem.

■ Announced that the Canada lynx may no longer warrant protection under the ESA and should be considered for delisting due to recovery. This recommendation is the result of almost 20 years of partnerships with state, federal, tribal, industry and other land managers across a large landscape.

■ Helping to finalize the development of a safe, effective, and economical sylvatic plague vaccine to protect prairie dogs in identified management areas is part of a multi-partner collaboration between FWS, USGS, USDA-APHIS, and Colorado Parks and Wildlife to increase populations of endangered black-footed ferrets (BFFs). The species is entirely dependent upon prairie dogs for survival, so efforts to protect prairie dogs are designed to bolster BFF numbers in an effort to recover the species and return management to states.

■ For the first time in nearly 40 years, endangered California condors roosted on Blue Ridge National Wildlife Refuge in the southern Sierra Nevada Mountains foothills in 2017. This is a milestone as the wild population grows the birds are expanding into their former range, which once included the entire West Coast from Canada to Northern Mexico.

■ As a result of integrated efforts by FWS and its partners including sea lamprey control, hatchery culture and stocking, restoration of aquatic connectivity, assessment and applied research, landlocked Atlantic salmon naturally reproduced in tributaries to the Lake Champlain Basin for the first time since early 1800s.

■ Issued national guidance clarifying when an Incidental Take Permit (ITP) is required under Section 10 of the ESA. The guidance clarified than an ITP is only needed when an activity is likely to result in the take of listed wildlife and it is up to an applicant's discretion whether to apply for a permit or not.

■ FWS proposed to replace existing regulations governing the nonessential experimental population of the red wolf under Section 10(j) of the ESA. If finalized, the action would further conservation of the red wolf by enhancing support for captive populations.

■ In June, FWS hosted a meeting with other federal agency representatives to discuss implementation of the "M opinion" to ensure consistency in application of the Migratory Bird Treaty Act across the federal government.

■ In July, FWS and NOAA Fisheries jointly proposed revisions to certain regulations under the ESA to ensure clarity and consistency. This continues the bureaus' joint efforts to improve how the ESA is implemented.

USFWS

■ Working with law enforcement counterparts from over 90 countries, FWS OLE participated in a global wildlife enforcement operation that highlights how the FWS works to protect our nation's border and natural resources, combats transnational organized crime, and collaborates with federal, state, and international law enforcement counterparts. In the U.S., examples of successful wildlife interdictions included 3,800 crocodilian skins, 1,030 live reptiles, and 1,796 partial sea turtle carapaces.

■ Biologists with the FWS, NPS, and BOR recently released endangered humpback chub, an fish species endemic to the Colorado River basin, into Bright Angel Creek in Grand Canyon National Park, following six years of successful removal of nonnative trout. This is an important milestone in the long-term effort to improve the species' odds of survival through the establishment of satellite spawning populations outside of the Little Colorado River.

Conservation Funding

■ Since February 2017, FWS has awarded more than $2.3 billion in grants through Pittman-Robertson and Dingell-Johnson act funds and State Wildlife Grant funds to states for improving access and fish and wildlife conservation.

■ Over $114 million has been approved for 99 NAWCA grants affecting over 580,000 acres in the U.S., Canada, and Mexico since January 2017. These funds will be matched by almost $245 million from project partners.

■ FWS announced $14 million in Boating Infrastructure Grants which support water-related outdoor recreation and tourism by improving facilities for large transient recreational boats across the country.

■ To support work under Secretarial Order 3362 on migration corridors, FWS set aside $3 million to address state research needs and $2 million to support habitat management activities. Of the latter amount, $500,000 will support a Migration Corridor grant program.

■ FWS distributed $2 million under the State and Interstate Aquatic Nuisance Species (ANS) Management Plan Grant Program. Forty four State and Interstate ANS plans have been approved to date.

■ Working with the National Fish and Wildlife Foundation, FWS established a Delaware Watershed Conservation Fund which will offer $4.3 million in competitive grants to conserve fish and wildlife habitat, improve water quality, manage water quantity and mitigate flooding, and support recreational opportunities in the Delaware River Watershed in Delaware, Pennsylvania, and New Jersey.

■ FWS will soon announce $3.8 million in grants to benefit migratory birds through the Neotropical Migratory Bird Conservation Act (NMBCA) for 28 collaborative conservation projects in 16 countries across the Americas. The NMBCA grants will leverage $14.2 million in additional partner funds.

U.S. Fish & Wildlife Service
http://www.fws.gov

August 2018

From:	Barbara Wainman
To:	Steve Guertin; Jim Kurth; Greg Sheehan; Charisa Morris; Kashyap Patel
Subject:	Fwd: Daily Letter Report for FWP
Date:	Thursday, June 7, 2018 12:40:31 PM
Attachments:	Congressional Correspondence Tracker_6-6-18.docx

---

How does this look for a format? I have not heard back from Micah on the status of the letters they have

Barbara W. Wainman
Assistant Director, External Affairs
US Fish and Wildlife Service
(202) 208-5256 (office)
(571) 471-4159 (cell)

---------- Forwarded message ---------
From: Kodis, Martin <martin_kodis@fws.gov>
Date: Wed, Jun 6, 2018 at 4:44 PM
Subject: Fwd: Daily Letter Report for FWP
To: Wainman, Barbara <barbara_wainman@fws.gov>

fyi.

---------- Forwarded message ----------
From: **Jones, Lisa** <lisa_m_jones@fws.gov>
Date: Wed, Jun 6, 2018 at 4:40 PM
Subject: Daily Letter Report for FWP
To: Martin Kodis <martin_kodis@fws.gov>, Angela Gustavson <angela_gustavson@fws.gov>

Attached. No updates today, and no new letters. I put in a color code key for when we do have changes.

I did not call OCL to ask about the letters that are with them.

Lisa

Lisa Hummon-Jones
Congressional and Legislative Affairs Specialist
U.S. Fish and Wildlife Service
703-358-2536 (o)
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--
Martin Kodis
Chief, Division of Congressional and Legislative Affairs
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5275 Leesburg Pike
Falls Church, VA 22041

703-358-2241 ph
703-358-2245 fax

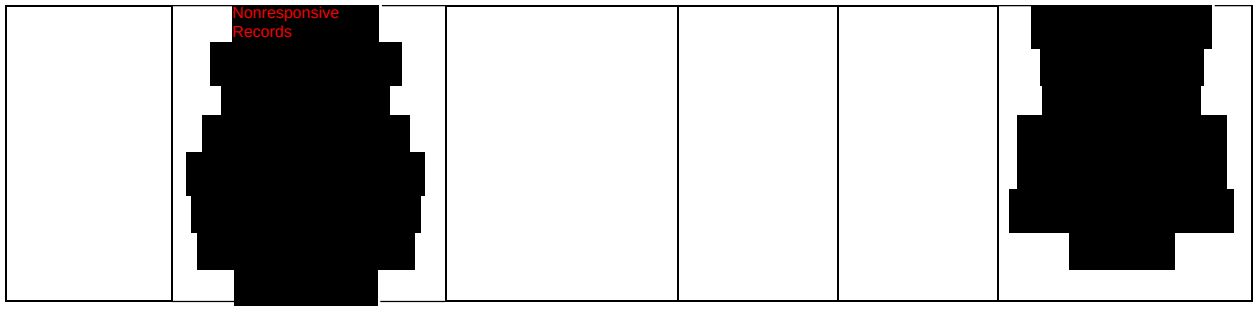
U.S. Fish and Wildlife Service Office of Congressional and Legislative Affairs
Status of Congressional Correspondence

Code

No Change
Change in Status
New Letter

DCN	Package Title	From (lead office)	To	Date Received	Status
Nonresponsive Records					

		Nonresponsive Records			
NA	Letter on GMO policy on NWRs	Abraham	Sec. Zinke	5/8/18	Not in DTS as of 6/4/18
Nonresponsive Records					


Nonresponsive
Records

From:	Gale, Michael
To:	Aurelia Skipwith
Cc:	Foster, Maureen; Greg Sheehan; Jim Kurth; Stephen Guertin; Charisa Morris; Wainman, Barbara
Subject:	BP on Study on Abnormal Amphibian Distribution on Refuges
Date:	Friday, October 6, 2017 3:31:32 PM
Attachments:	DOI Info Memo - Amphibian Study.docx Continental_2010_extent patterns in amphibian malformations linked to parasites, chemical contaminants and their interactions.pdf

---

Hello Aurelia,

Attached is the briefing paper you requested from our Public Affairs office on the upcoming publication of a study related to abnormal amphibian distribution on national wildlife refuges. Also attached is a copy of the study. This had been an item in our Weekly Report.

Please let us know if you have any questions or need any additional information.

cheers,

Michael

--

Michael Gale

Deputy Chief of Staff (Acting), Director's Office
U.S. Fish and Wildlife Service

202.208.4923 (office)
571.982.2158 (cell)

Information Memorandum for the Deputy Assistant Secretary

Date: October 6, 2017

From: Gavin Shire, Chief of Public Affairs, U.S. Fish and Wildlife Service

Telephone #: 703-358-2649

Subject: Study on Abnormal Amphibian Distributions on National Wildlife Refuges

I. Introduction

A scientific paper will be published in the journal, Global Change Biology, on October 10, 2017, titled *Continental-extent patterns in amphibian malformations linked to parasites, chemical contaminants and their interactions*. Two of the co-authors are U.S. Fish and Wildlife Service employees, and the majority of the data came from the Service's abnormal amphibian monitoring program, which was conducted on national wildlife refuges across the nation.

II. Background

This study was not commissioned as part of a direct policy initiative. The Service continuously reviews our practices for wildlife management using the best available, peer-reviewed scientific information. This study contributes to the body of knowledge on amphibian malformations and potential correlations with environmental factors.

To our knowledge, this represents the first systematic, continental-scale analysis to evaluate factors affecting amphibian abnormality patterns in nature. The study indicates both contaminants and parasites are associated with abnormalities. When we looked for how causes might change across the country, results varied by region, which supports the idea that there are different causes behind the abnormalities in different places.

The study demonstrates that at the landscape level, abnormal frogs occur infrequently or not at all on most national wildlife refuges. Results of the completed, current and planned research will aid the conservation of amphibians and our understanding of the food webs and ecosystems upon which we all depend.

In a nationwide survey of frogs and toads on national Wildlife refuges, we examined 53,880 amphibians representing 41 species during 934 field trips to 422 wetlands in 127 refuges over 13 years.

Prior results of this survey were published in 2013 in the Journal PLOS One, a publication of the Public Library of Science (http://dx.plos.org/10.1371/journal.pone.0077467). The primary objective of prior research was to characterize the frequency and geographic distribution of abnormal frogs and toads on national wildlife refuge lands.

In the current paper, we analyzed data from this survey to test theories about causes of skeletal abnormalities: (1) chemical contaminants associated with oil and gas development and pesticides known to be toxic to frogs, (2) land use that could contribute to water pollution (agriculture and urbanization), (3) parasite infection, and (4) interactions between parasites and pesticides.

Although abnormalities were rare overall (average = 1.6%), we identified 96 hotspot sites with 5% to 25% abnormal individuals. Nationwide abnormality frequencies were higher when there were oil and gas wells in the watershed. Because parasite sampling cost more and was more intensive, parasites were sampled at a subset of sites where abnormal frogs had been found in prior years by researchers. At these sites, parasites were found in frogs at 38% of the sites (39 of 102 sites).

III. Positions of Interested Parties

Amphibian populations are declining at rapid rates, likely due to changes in their habitat, diseases, and environmental pollution. Scientists consider amphibians to be indicators of environmental health. Since amphibians are exposed to a variety of habitats as they develop, and their skin is permeable to water and air, amphibians are sensitive to changes in water and air quality.

In 2000, the U.S. Congress asked the Service to address growing concerns about the nation's amphibians. Most scientists believe that frog abnormalities are caused by one or more of the following factors working alone or together: contaminants, parasites, or predators. It is likely that causes vary by location.

IV. Potential Issues/Conflicts

Some interest expected by media and scientific community.

V. Communications and Outreach

Outreach Lead:	Pieter Johnson, University of Colorado
Affected States:	42 states in the conterminous USA
Media POC:	Pieter Johnson, University of Colorado, will be the primary media contact for any questions regarding the science and results of the publication. Pieter fills this role as a co-author and supervising professor of the post-doctoral researcher who was the lead author.
Congressional:	N/A
State Contacts:	N/A
Other Outreach:	No proactive outreach planned. We will respond to media inquiries using prepared talking points. Questions concerning U.S. Fish and Service policy, guidance, or other agency-centric questions will be referred to Vanessa Kauffman in Public Affairs. She will coordinate with the appropriate programs and staff on any responses.

DR. SARAH ELIZABETH HAAS (Orcid ID : 0000-0001-8728-9684)

Accepted Article

Article type : Primary Research Articles

Title: Continental-extent patterns in amphibian malformations linked to parasites, chemical contaminants and their interactions

Running head: Continental patterns in amphibian malformations

Author names: Sarah E. Haas[1,2], Mari K. Reeves[3], Alfred E. Pinkney[4], and Pieter T.J. Johnson[1]

Institute of origin: [1]Department of Ecology & Evolutionary Biology, University of Colorado, Boulder, CO, 80309, USA; [2]Current address: Texas Parks and Wildlife Department, Inland Fisheries Division, 4200 Smith School Rd, Austin, TX, 78745, USA; [3]U.S. Fish and Wildlife Service, Pacific Islands Fish and Wildlife Office, 300 Ala Moana Blvd, Honolulu, HI, 96850, USA; [4] U.S. Fish and Wildlife Service, Chesapeake Bay Field Office, 177 Admiral Cochrane Dr., Annapolis, MD, 21401, USA

Corresponding author: Sarah E. Haas; email: Sarah.Haas@tpwd.texas.gov; phone: 1-512-389-4655; fax: 1-512-389-4405

Abstract

Widespread observations of malformed amphibians across North America have generated both concern and controversy. Debates over the causes of such malformations—which can affect >50% of animals in a population—have continued, likely due to involvement of multiple causal factors. Here, we used a 13-year dataset encompassing 53,880 frogs and toads from 422 wetlands and 42 states in the conterminous USA to test hypotheses relating

This article has been accepted for publication and undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process, which may lead to differences between this version and the Version of Record. Please cite this article as doi: 10.1111/gcb.13908
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Accepted Article

abnormalities and four categories of potential drivers: (1) chemical contaminants, (2) land use practices, (3) parasite infection, and (4) targeted interactions between parasites and pesticides. By using a hierarchically-nested, competing-model approach, we further examined how these associations varied spatially among geographic regions. Although malformations were rare overall (average = 1.6%), we identified 96 hotspot sites with 5 to 25% abnormal individuals. Using the full dataset of 934 collections (without data on parasite infection), malformation frequency was best predicted by the presence of oil and gas wells within the watershed. Among collections also examined for parasite infection (n=154), average parasite load and its interaction with pesticide application positively predicted malformations: wetlands with a greater abundance of the trematode *Ribeiroia ondatrae* were more likely to have malformed amphibians, but these effects were strongest when pesticide application was also high, consistent with prior experimental research. Importantly, however, the influence of these factors also varied regionally, helping explain divergent results from previous studies at local scales; parasite infection was more influential in the West and Northeast, whereas pesticide application and oil/gas wells correlated with abnormalities in the Northeast, Southeast and western regions of the USA. These results, based on the largest systematic sampling of amphibian malformations, suggest that increased observations of abnormal amphibians are associated with both parasite infection and chemical contaminants, but that their relative importance and interaction strength varied with the spatial extent of the analysis.

Introduction

Widespread observations of malformed amphibians in North America have prompted concern as well as controversy among scientists and the general public (Souder, 2000; Rohr et al., 2008a; Johnson et al., 2010a; Skelly & Benard, 2010; Reeves et al., 2013). To date, at least 70 species of amphibians have been reported with abnormalities, for which the majority

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Accepted Article

of observations involve recently metamorphosed frogs and toads (anurans) from wetland habitats (Johnson et al., 2010a). Of particular concern are recent observations that document substantially higher levels of severe malformations (defined as permanent structural defects resulting from abnormal development, whereas abnormalities refer to any gross deviation from the normal range in morphology), ranging from 5 to 100% of sampled individuals (Lannoo, 2008; Johnson & Bowerman, 2010; Johnson et al., 2010a). While some small fraction of abnormalities may occur in any amphibian population, available data indicate this baseline frequency is <5%, with populations exhibiting significantly higher frequencies classified as "hotspots" (Ouellet, 2000; Johnson et al., 2002, 2010a). The most frequently reported abnormalities involve the hind limbs, including partially missing limbs, completely missing limbs, extra limbs, and misshapen limbs (Johnson et al., 2010a; Reeves et al., 2013). Most recent reports involve North American amphibians, although mass malformations have also been observed in other countries (Ouellet, 2000; Flyaks & Borkin, 2004; Bacon et al., 2006; Gurushankara et al., 2007; Laurentino et al., 2016). Several retrospective studies based on museum samples and historical resurveys further indicate that limb malformations have increased over time (McCallum & Trauth, 2003; Hoppe, 2005; Johnson & Lunde, 2005), highlighting the importance of investigating environmental changes associated with morphological abnormalities through space and time.

Debate over the causes of abnormalities and their relative importance has been extensive (Ballengée & Sessions, 2009; Johnson & Bowerman, 2010; Skelly & Benard, 2010). Attention has focused on factors with the potential to disrupt development of amphibians during their aquatic phase (i.e., tadpoles), for which the most commonly advanced hypotheses include parasite infection, chemical contaminants, changes in land use practices (e.g., roads, agriculture, or urbanization), and injuries from introduced predators (Ankley et al., 2004; Taylor et al., 2005; Johnson et al., 2010a; Reeves et al., 2010; Lunde & Johnson, 2012). For

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instance, both experimental studies and field-based correlations have linked infection by the digenetic trematode *Ribeiroia ondatrae* to amphibian limb abnormalities in multiple regions of North America (Johnson et al., 2002; Kiesecker, 2002; Johnson & Hartson, 2009; Lunde et al., 2012; Roberts & Dickinson, 2012). These parasites specifically encyst around the developing limb buds of tadpoles, often disrupting growth leading to extra limbs, missing limbs, skin webbings, and other malformations (Sessions et al., 1999; Johnson et al., 2004, 2012, 2013). However, other wetlands with a high frequency of abnormal frogs do not support *R. ondatrae* infection (Skelly et al., 2007; Reeves et al., 2008; Bowerman et al., 2010), reinforcing the need to investigate additional factors. Extensive research has investigated the role of chemical stressors in disrupting amphibian development (summarized in Johnson et al., 2010a), including evidence that abnormalities are associated with a wetland's proximity to agricultural (e.g., pesticides and fertilizer; Taylor et al., 2005; Gurushankara et al., 2007; Rohr et al., 2008a) or industrial activities (e.g., coal combustion waste, petroleum hydrocarbons; Hopkins et al., 2000; Flyaks & Borkin, 2004). While laboratory studies suggest that water and sediment extracts from contaminated sites can induce amphibian abnormalities (Bridges et al., 2004), linking field-observed patterns to specific compounds is complicated by the diversity of chemicals released into the environment and their potential to interact with one another or additional factors (Johnson et al., 2010a). Finally, observational field surveys and experimental manipulations indicate that sublethal predation by aquatic predators, such as larval dragonflies, introduced fishes, and leeches, can also contribute to abnormal limb growth (Ballengée & Sessions, 2009; Bowerman et al., 2010; Johnson & Bowerman, 2010). When such attacks involve tadpoles still undergoing limb development, the resulting abnormalities may not appear to be the obvious outcome of trauma (Bowerman et al., 2010), challenging efforts to determine the causative agent by abnormality type alone.

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Despite progress in identifying the causes of abnormalities in some localities, opportunities to broadly evaluate the importance of multiple causal factors and how they vary spatially has been hindered by the narrow spatial extent of previous surveys, an overall tendency to focus on single-factor explanations, and inconsistent methodologies among studies (Johnson et al., 2010a; Lunde & Johnson, 2012). Given the large geographic extent over which abnormalities have been reported, it is likely that multiple causative agents are involved, the importance of which will vary spatially in form and magnitude. Studies that explicitly consider spatial non-stationarity (i.e., parameter values that vary in space) are therefore increasingly essential for understanding and forecasting complex ecological phenomena (Bini et al., 2009; Cohen et al., 2016). For instance, the factors underlying the risk of human-caused wildfires in the Mediterranean Basin are highly region-specific: while the amount of forested area is a broad predictor of risk, fires in agrarian areas are associated with land abandonment and increased fuel build-ups whereas those near more urbanized regions are often linked to land encroachment (Koutsias et al., 2010). Moreover, the factors underlying amphibian malformations have inherent potential to interact; exposure to pesticides, for instance, can suppress amphibian immunity and increase infection by parasites (Rohr et al., 2008a; Hayes et al., 2010; Jayawardena et al., 2016; Pochini & Hoverman, 2017), while toxic metals have been hypothesized to interfere with larval amphibians' ability to evade aquatic predators such as larval dragonflies (Reeves et al., 2010, 2011; Hayden et al., 2015). These observations underscore the potential for regional variation in causes and emphasize the need for large-scale, systematic surveys of abnormalities combined with multifactorial measurements of possible causative agents.

Here we use data collected across 42 states in the conterminous USA to evaluate drivers of amphibian malformations both at national and regional spatial extents. Between 1999 and 2012, we assessed abnormalities in 53,880 amphibians representing 41 species across 422

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wetlands and 127 U.S. Fish and Wildlife Service (USFWS) National Wildlife Refuges (see Reeves et al., 2013). Using a hierarchically-nested, competing-model approach, we evaluated the explanatory power of targeted causative agents that have received prior research support: parasitic trematodes, chemical contaminants, and anthropogenic forms of land use (Johnson et al., 2002, 2010a; Taylor et al., 2005; Rohr et al., 2008a). Specifically, we compiled and combined spatially-explicit information on land cover, the distribution of oil and gas wells, application of pesticides and fertilizers, and abundance of the trematode *Ribeiroia ondatrae* (collected at a subset of wetlands as part of this project) to test the capacity of these variables to predict patterns of skeletal malformations in amphibian populations across North America. Based on previous research, we expected a higher prevalence of morphological abnormalities in wetlands adjacent to agriculture or industrial activities, or those with greater *R. ondatrae* infection (Johnson et al., 2002, 2013; Lunde et al., 2012). We also tested the influence of targeted interactions between parasite infection and pesticide application on the basis of prior experimental studies and region-specific field research (Rohr et al., 2008a, 2008b). Importantly, we examined how these response-environment associations varied spatially by comparing the identity and explanatory power of hypothesized factors at national versus regional spatial extents, which has important implications for how potential threats are studied and managed.

Materials and Methods

Site and species selection

We selected wetlands distributed across National Wildlife Refuges based on the known or suspected presence of amphibians and the availability of accessible habitat. In total, our sampling included 422 wetlands on 127 Refuges in 42 states across the conterminous USA, encompassing a broad range of ecoregions and land use histories (Fig. 1). We focused on

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frogs and toads with a particular emphasis on lentic-breeding species within the genera *Rana* and *Lithobates* (see Appendix S1 for a list of the 41 species), owing to their widespread distribution, prior history of abnormalities, and the value of focal taxa for broad-scale comparisons (Ouellet 2000; Lunde and Johnson 2012). Potential amphibian breeding areas were identified based on preliminary site visits and discussions with Refuge personnel. Sites were usually small wetlands or other water bodies, such as agricultural ponds, marshes, or roadside ditches, located within Refuges, Wetland Management Districts (WMD), or Waterfowl Production Areas (WPA). However, while Refuges are managed "to conserve, protect, and enhance fish, wildlife, plants, and their habitats for the continuing benefit of the American people" (USFWS Mission Statement), they vary considerably in habitat, water quality, biological diversity, and land use history. Some of the sampled Refuges represent nearly undisturbed natural habitats, whereas others have been affected by prior land use practices associated with significant habitat degradation or contamination, thereby creating broad variation well-suited for our survey of amphibian abnormalities.

Field sampling

Sampling of wetlands was conducted between 1999 and 2012; individual wetlands were typically visited once or twice per season, with a late-spring or early summer visit to detect amphibian activity and guide the timing of a second visit to catch animals near metamorphosis. While most if not all USFWS regions were sampled each year, specific wetlands were generally visited over the course of one to two (often consecutive) years, thereby maximizing the total sampling coverage within and among regions. During each collection event, we aimed to capture 50 individual amphibians of a given species and examine them for external abnormalities following established protocols (USFWS, 1999). We focused on developmental stages from forelimb emergence through full tail resorption (i.e., metamorphosis), given that abnormalities are more easily observed at these stages

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(rather than during early larval development) and that abnormal animals often die before reaching sexual maturity (Lunde & Johnson, 2012). Although numerous types of amphibian abnormalities were recorded across sites (USFWS, 1999; Reeves et al., 2013), we focus here on skeletal malformations involving the limbs, including: extra limbs (polymelia) and/or digits (polydactyly); missing limbs (amelia), limb segments (ectromelia), or digits (ectrodactyly); and other miscellaneous types of skeletal malformations (e.g., abnormal skin webbing). Abnormalities that did not affect the skeleton, such as open wounds, scarring, or eye abnormalities, were excluded. Abnormality data used in this paper have been posted to Data Dryad (http://doi.org/10.5061/dryad.dc25r).

To evaluate patterns of parasite infection, we selected a subset of normal and malformed (when present) individuals from collections in each region. Collections were chosen for parasite analysis based on (1) the presence of malformed frogs in prior collections and (2) attempts by regional biologists to obtain broad spatial coverage within USFWS regions. Both normal and abnormal animals were necropsied to determine the abundance of *Ribeiroia ondatrae* cysts or metacercariae, which are typically found within or just beneath the skin around the developing hindlimbs or, less often, around the mandible (Johnson et al., 2004). *Ribeiroia ondatrae* has a complex life cycle involving sequential transmission among rams horn snails, larval amphibians, and birds or mammals (Johnson et al., 1999, 2002; Lunde & Johnson, 2012; Roberts & Dickinson, 2012). Parasite encystment within the developing tadpoles can disrupt normal limb growth, which is ultimately hypothesized to increase parasite transmission by amplifying predation by avian hosts (e.g., Johnson et al., 2004). Whenever possible, we examined between 10 and 20 freshly-caught animals to facilitate accurate identification of living parasites and minimize errors in parasite detection and abundance (Lunde & Johnson, 2012). Investigators used a stereo-dissecting microscope to examine the major organ systems, digestive tract, and skin (external and internal) of each frog

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to quantify all visible parasites. Once excysted, metacercariae of *R. ondatrae* were identified based on the presence of esophageal diverticula and other diagnostic morphological features (e.g., Lunde & Johnson, 2012). Because infection can vary strongly among years and species, we calculated *R. ondatrae* abundance—or the average number of metacercariae per frog in a collection (Bush et al., 1997)—only within the same year and species of the corresponding collection event. We used abundance rather than presence/absence because previous studies have shown that *R. ondatrae* infection load correlates positively with malformation frequency (Johnson et al., 2002, 2004; Johnson & Hartson, 2009). Only sites with at least five dissected individuals of the same host species that could also be linked to full malformation assessments from the same year were included. One hundred and fifty-four of the total 934 collections (16%) fulfilled these criteria (corresponding to 102 wetlands on 63 Refuges in 31 states; see Appendix S5 for a map displaying the geographic location of these sites).

Variable construction

An important analytical challenge in conducting analyses at a continental extent is obtaining standardized environmental variables measured at a scale compatible with that of the response yet still spanning the relevant geographic extent (Levin, 1992). To quantify the influence of anthropogenic forms of land use adjacent to wetlands where amphibians were surveyed, we estimated the proportion of land cover types within HUC-12 watersheds (USGS, 2017) by averaging values from the 2001 and 2006 National Land Cover Data products (at a 30 x 30 m resolution) (Homer et al., 2004), which broadly captured our sampling period. We consolidated the low intensity, medium intensity and high intensity developed land cover categories into one class of developed land. We grouped woody wetlands, emergent herbaceous wetlands, and open water into a single category to encompass the amount of nearby wetland area, which was included because of its expected influence on amphibian occupancy and abundance (Gould et al., 2012). Cultivated crops and pasture/hay

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were combined to represent agricultural activity as a broad category frequently invoked as a potential driver of amphibian malformations (Taylor et al., 2005). Consolidation of land cover types was performed to improve classification accuracy and simplify the environment for our evaluation. We selected the HUC-12 watershed as preferable to arbitrary distance classes that may have omitted information about the directional flow of water.

To obtain information on chemical contaminants, we extracted publicly available county-level data on pesticide and fertilizer use for all counties in the conterminous USA (field-based water samples were not collected as part of this study). Estimates of annual, county-level pesticide use—for selected herbicides, insecticides, and fungicides applied to agricultural crops grown in the USA from 1992–2009—were obtained from the USGS National Water-Quality Assessment Program (Thelin & Stone, 2013). We narrowed the list of chemicals for inclusion in our pesticide exposure variable to nine compounds that have been shown to pose risks to amphibians: atrazine, carbaryl, chlorpyrifos, chlorothalonil, copper, diazinon, endosulfan, glyphosate and malathion (see Appendix S2 for details on the pesticide selection process). We excluded data prior to 1998 to match the temporal extent of amphibian surveys (1999–2012), retaining the previous year to capture possible lag effects of pesticides remaining in the environment. For each unique compound-year combination (which is how the raw data were obtained), we weighted pesticide application (kg) by the geographic area (km^2) of each county. We then applied a natural log (x + 1) transformation to help normalize the distribution prior to scaling. Because pesticides vary in their toxicity per unit volume, we scaled pesticide application by dividing these values by the standard deviation of each respective compound-year combination from all counties, and then summed these scaled values among all years and compounds for each county. This effectively identified counties with relatively high (or low) application values for the selected pesticides, concurrently accounting for variation in toxicity per unit volume. To ensure these results were insensitive

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to the pesticides and scaling approach, we verified that similar effects were generated with the unscaled values (i.e., non-transformed but weighted by county area) of all 433 insecticides, herbicides, and fungicides (applied during 1998–2012), and that effects persisted even with removal of the well-studied herbicide atrazine from the nine focal compounds (see Appendix S2). We also obtained county-level estimates of nitrogen and phosphorus fertilizer applied commercially (farm and non-farm uses) in the conterminous USA from 1987–2006 (Gronberg & Spahr, 2012). We calculated fertilizer exposure for each county by summing the cumulative amount of fertilizer applied (kg) from 1998–2006 and weighted by county area. Previous research has highlighted the potential for nutrient inputs to have both direct effects on amphibians (Marco & Blaustein, 1999) as well as indirect effects mediated through trematode infection (Johnson et al., 2007; Rohr et al., 2008a).

Finally, we assessed oil and gas development in the vicinity of wetlands as a possible source of contaminants. Ramirez & Mosley (2015) documented chronic pollution at oil and gas production sites on National Wildlife Refuges across the USA, ranging from localized oil or brine spills to flowline leaks releasing large volumes of pollutants. Moreover, region-specific field surveys have suggested links between abnormal vertebrate development and the presence of petroleum and heavy metal-based contamination, which is also supported by toxicological research (Mahaney, 1994; Reeves et al., 2010, 2011; Bacon et al., 2013; Hayden et al., 2015). To generate our oil/gas well variable, we collected publicly available data on the geographic location, type, and status of oil and gas wells for all states that had petroleum production and included our amphibian survey sites (n=21 states). These data were amassed on a state-by-state basis and then trimmed by removing wells that were initially drilled after 2009 and those classified as “dry” wells (i.e., wells that never produced oil or gas; see Appendix S3 for additional data cleaning steps of this variable). We used the trimmed data to construct estimates of: (1) well presence/absence within each HUC-12

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watershed, and (2) well density (number of wells divided by the watershed area). We used well presence rather than density in our statistical models because the distribution of the latter variable was highly bimodal: at the national extent, about half of the watersheds with study sites had no wells.

Analytical procedures

To evaluate potential drivers of skeletal malformation prevalence, we fit generalized linear mixed models (GLMMs) using the 'lme4' library, v 1.1-7 (Bates et al., 2015) in R v. 3.2.0 (R Development Core Team, 2010). GLMMs explicitly allow for non-normal error distributions (such as binomial for malformations in this case) and inclusion of 'grouping variables' as random terms, alongside advantages in accommodating unbalanced designs, correcting for sources of autocorrelation (including spatial autocorrelation), and using 'shrinkage' to improve parameter estimation, which is especially important for subgroups with limited sampling intensity (Gelman & Hill, 2007; Zuur et al., 2009). The sampling unit in all analyses was the individual collection event (collection of the same species at the same site on the same date) and the response variable was the number of malformed amphibians relative to the number of normal frogs, which was modeled as a binomial error distribution with a log-link function. By using the 'cbind' function in R to combine the number of abnormal and normal frogs in the response metric, our models weighted collection events by the total sample size, helping to avoid the use of arbitrary sample size thresholds and the discounting of potentially meaningful data. We standardized numerical covariates by subtracting their mean and dividing by their standard deviation, thereby centering each at zero and placing values on a standard deviation scale to facilitate comparisons of regression coefficients. We also applied a $\log_{10}(x + 1)$ transformation to parasite abundance and pesticide exposure.

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Prior to model construction, we used pairwise correlation coefficients to identify collinearity among candidate predictor variables and examined the variance inflation factors of multivariate models to further ensure model validity. We omitted fertilizer exposure because it was highly correlated with pesticide exposure (Pearson r >0.74) and led to high variance inflation when both terms were included together (VIF=3.8). For some region-specific models, we also had to exclude agricultural land use or developed area owing to high correlations with pesticide use (Table 1; see Appendix S4 for more detail). To accommodate non-independence among collections in space and time, we included random intercept terms for wetland identity, sampling year, HUC-12 watershed, and the USFWS administrative region (see Appendix S4 for further justification). We did not include a random effect for amphibian species identity both because of the large geographic extent of the study (such that most species did not extend beyond specific regions) and because exploratory analyses suggested that neither a species- nor family-level random effect accounted for significant variation in the response, consistent with the findings of Reeves et al. (2013). We tested for overdispersion in all models (using the "overdisp_fun" function in R) by calculating the sum of squared Pearson residuals and comparing it to the residual degrees of freedom (Venables & Ripley, 2002). To address overdispersion detected in some models (see Appendix S4), we included an observation-level (collection-level) random effect (OLRE). This method involves giving each observation a unique level of an added random intercept term, thereby helping absorb the 'extra' binomial variation, providing more robust estimates of parameters, and more accurately partitioning explained and unexplained variation in the data (Elston et al., 2001; Harrison, 2014, 2015); in other models, overdispersion was negligible and no OLRE was included.

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Building upon our hypotheses, we constructed the following set of candidate models: (1) a null model containing the intercept and random effects only; (2) six univariate models for each fixed effect (pesticide exposure, oil/gas well presence, parasite abundance, and proportion of agricultural, developed, and wetland land use within each watershed); (3) three multivariate models corresponding to either "chemical contaminants" (pesticide exposure + well presence), "land use" (agriculture + developed + wetland), or "parasite-by-pesticide interactions" (parasite abundance-by-pesticide exposure); and (4) a global model containing all six fixed effects and a parasite-by-pesticide interaction term. Because parasite infection was only assessed in a subset of 154 collections from 102 wetlands, which were chosen in part based on detection of malformations (protocols available: http://datadryad.org/resource/doi:10.5061/dryad.dc25r), we performed this analysis both on two datasets: one with the parasite covariate (n=154 collections from 102 sites) and one without (934 collections from 422 sites). Thus, the dataset with parasite infection was a non-random subset of all collections that allowed us to examine the individual and combined influence of *R. ondatrae*, chemical contaminants, and land use variables. To examine spatial non-stationarity in environment-response associations, we also examined the influence of these variables at a regional spatial extent using the USFWS administrative regions (Fig. 1); once again, these models were run both with and without the parasite infection covariate to allow maximal use of the data. We omitted the parasite-by-pesticide interaction term from the regional models owing to the reduction in sample size and a desire to avoid over-fitting. Because some of the predictors were collinear within regions, the specific covariates included varied slightly among regions (Table 1; Appendix S4). Residuals from the best-supported models for each analysis (national and region-specific extents, both with and without parasite infection) were examined for evidence of overdispersion, spatial autocorrelation, and other diagnostics to help assess model validity (see Appendix S4).

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We used an information-theoretic approach coupled with model averaging to evaluate the importance of land use, chemical contaminants, parasites, and targeted interactions in explaining the distribution of amphibian skeletal malformations. Candidate models were ranked by Akaike's Information Criterion corrected for small sample size (AIC_C), and model-averaged parameter estimates, standard errors, and 95% confidence intervals were obtained based on weighted support from candidate models (Burnham & Anderson, 2002). This approach has the advantage of providing a formal "relative strength of evidence" for each of the alternative hypotheses (Burnham et al., 2011). Model-averaging was performed by calculating a weighted-average of parameter estimates across all models in the full set of candidate models considered. Thus, parameter estimates of more likely models count more toward parameter estimates of the averaged model. We used the 'natural-average method' for parameter estimation (Burnham & Anderson, 2002), whereby models that did not include a given parameter were excluded from the averaging of that particular estimate. Analyses were performed using the MuMIn (Multi-Model Inference) R-package (Barton, 2015).

Results

Sampling overview: Over 13 years we obtained 934 collections from 422 wetlands and 127 National Wildlife Refuges to examine skeletal malformations. In total, 53,880 amphibians representing 41 species were surveyed. When examining average malformation prevalence across space, we first examined collections with at least 30 individuals (n=620 collections) to increase confidence in our estimates (Fig. 1). Whereas abnormalities were rare in most of these collections, the percentage of malformed amphibians ranged from 0 to >25%, with approximately 47% (n=292) of those collections exhibiting ≥2% malformed amphibians and 22% (n=138) at or exceeding the oft-cited baseline frequency of 5% (Lunde & Johnson, 2012). When using the binomial mixed-effects model to account for variation in

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sample size, study location, and sampling year (allowing us to use all 934 collections), we estimated a model-adjusted mean malformation frequency of 1.6% [95% CI: 1.0 to 2.3%]. Among regions, the Midwest (model-adjusted mean=2.5% [1.8-3.4%], n=176 collections), Northeast (model-adjusted mean=2.1% [1.3-2.9%], n=189 collections) and Pacific (model-adjusted mean=2.0% [1.1-3.6%], n=99 collections) regions exhibited the highest frequencies of skeletal malformations, followed by the Southeast (model-adjusted mean=1.8% [1.2-2.5%], n=233 collections), Mountain Prairie (model-adjusted mean=0.9% [0.5-1.4%], n=120 collections) and Southwest regions (model-adjusted mean=0.6% [0.3-1.0%], n=117 collections). *Ribeiroia ondatrae* infection was detected within 39 of 102 sampled wetlands (38%) with corresponding malformation surveys; average infection load per collection ranged from 0.1–55.8 metacercariae per frog (10.3 ± 1.7 SEM). Infection was highest in the Northeast (average load among collections with at least one infected frog =13.1 metacercariae; n=37 collections), followed by the Pacific (7.1 metacercariae; n=9 collections), Midwest (6.9 metacercariae; n=15), and Mountain Prairie regions (2.1 metacercariae; n=3); there were no parasite detections in the Southwest and Southeast regions. Across all regions, the highest parasite loads were observed at Great Swamp NWR (55.8 metacercariae per frog, 11.9% abnormal of 59 sampled) and Erie NWR (47.8 metacercariae per frog, 5.5%, n=55) in the Northeast and Ellicott Slough NWR in the Pacific (47.3 metacercariae per frog, 25.2% abnormal, n=107). Maps illustrating the spatial variability of each predictor variable across the USA can be found in Appendix S5.

National scale analysis: At the national extent using the subset of collections in which parasites were examined, the best-performing model included a main effect of *R. ondatrae* abundance as well as a parasite-by-pesticide interaction, such that malformations increased more steeply at sites with high levels of both parasites and pesticides (Table 1, 2, Fig. 2). The model-averaged, standardized coefficient estimates for parasite abundance and the parasite-

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by-pesticide interaction were $\hat{\beta}$=0.27 (95% CI: 0.08–0.46) and $\hat{\beta}$=0.20 (95% CI: 0.03–0.37). No other covariates had 95% confidence intervals that did not include zero. Inclusion of fertilizer application—rather than pesticides—was also associated with higher malformations ($\hat{\beta}$= 0.23; P=0.04), but no interaction with parasite infection was found ($\hat{\beta}$= 0.04; P=0.63) (see Appendix S4 for more detail). Repeating these analyses on the full dataset representing 934 collection events, the presence of oil/gas wells within the watershed was associated with higher malformations in the best-supported model (Table 2). The model-averaged coefficient for oil/gas wells was also the only coefficient in the national dataset for which the 95% confidence interval excluded zero ($\hat{\beta}$= 0.37; 95% CI: 0.05–0.68) (Table 1, 2, Fig. 2). Residuals from the best-supported models both with and without parasite infection showed no evidence of overdispersion or spatial autocorrelation (see Appendix S4)

Regional scale analysis: By geographically decomposing the national models, we evaluated the region-specific influence of candidate variables on malformation patterns in the datasets both with and without parasite examination (Table 1, 2, Fig. 2). These analyses identified model similarities and differences as a function of scale (national vs. regional) and the specific dataset (full vs. subset with parasite examination). For the dataset with parasites examined (n=154 collections), the best-supported model for the Pacific region included parasite abundance (model-averaged regression coefficient: $\hat{\beta}$=0.46; 95% CI: 0.27–0.64), while the second best-performing model included oil/gas well presence ($\Delta AIC_C = 9.74$; model-averaged coefficient: $\hat{\beta}$=1.22; 95% CI: 0.04–2.41). Similarly, in the Northeast, malformation frequency increased with parasite abundance ($\hat{\beta}$=0.47; 95% CI: 0.22–0.71) and pesticide exposure ($\hat{\beta}$=0.51; 95% CI: 0.09–0.92), but decreased with well presence ($\hat{\beta}$= -1.48; 95% CI: -2.36 – -0.60) (although well presence and pesticide application were marginally collinear [r=0.6], see Appendix S4). In the best-supported models for the Southeast region, where *R. ondatrae* infection was not detected among any of the samples processed for

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parasites (n=13), malformations associated positively with oil/gas wells ($\hat{\beta}$=1.78; 95% CI: 0.82–2.74) and pesticide exposure ($\hat{\beta}$= 0.49; 95% CI: 0.04 – 0.94). Models for the Mountain Prairie and Midwest regions failed to identify influential covariates, such that all of the 95% confidence intervals around the model-averaged coefficients included zero, and too few sites (n=2) in the Southwest included data on parasite examination (see below for the analysis without parasite infection).

When analyzing region-specific models without the parasite covariate (the larger dataset with 934 collections), we found that malformation frequency was higher within watersheds that contained one or more oil/gas wells in the Pacific region ($\hat{\beta}$=0.83; 95% CI: 0.12–1.54), in broad parallel to findings using the parasite-data subset for this region as well as the national-scale model with all collections. In the Northeast, malformations were marginally higher in counties with more pesticide application ($\hat{\beta}$=0.30; 95% CI: -0.02–0.61), consistent with the analysis using the parasite dataset. In the Southeast region, only the amount of wetland area was associated with malformation frequency ($\hat{\beta}$= -0.49; 95% CI: -0.78 – -0.23), without the observed links to pesticides and oil/gas wells detected among the subset of sites examined for parasites in this region. No other regional models conducted with this dataset—including those for the Midwest, Mountain Prairie, and Southwest—contained model-averaged regression coefficients excluding zero from the 95% confidence intervals.

Discussion

The widespread nature and suspected increase in amphibian malformations have prompted interest from scientists and alarm from the general public (Kaiser, 1997; Burkhart et al., 2000; Souder, 2000; Rohr et al., 2008a). Despite numerous studies examining the potential causes of malformed amphibians (see reviews by Ouellet, 2000; Ankley et al., 2004; Johnson et al., 2010a; Lunde & Johnson, 2012), the factors responsible for recent

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observations of abnormalities in North American amphibians remain controversial (Johnson & Bowerman, 2010; Sessions & Ballengée, 2010; Skelly & Benard, 2010). Given the large spatial extent over which abnormalities have been reported, it is highly likely that multiple factors are involved—either individually or through interactions—and that their effects vary with geographic location. As such, one of the greatest challenges to this investigation is the difficulty of disentangling the relative contributions of multiple factors, particularly those that co-occur on the landscape or vary spatially and temporally in their influence on amphibian development (Johnson et al., 2010a; Reeves et al., 2013).

Here, we coupled results of a continental-extent, systematic survey of skeletal malformations in 41 species of amphibians across the USA with a hierarchically-nested assessment of hypothesized drivers, including parasite infection, pesticide use, oil and gas contaminants, land use, and targeted interactions between parasites and pesticides. This entailed a uniquely extensive compilation of geospatial data on watershed-level exposure to chemical threats as well as empirical collection of covariates such as *R. ondatrae* infection abundance. While malformations were rare in most amphibian populations (1.6% model-adjusted average prevalence), we identified 96 "hotspot" locations with skeletal malformations affecting 5 to 25% of examined individuals (when $\geq$ 30 individuals examined) (see also Reeves et al., 2013). Consistent with our hypotheses and prior surveys conducted at local extents, results of the national-extent analyses identified roles of both parasite infection and chemical contaminants in predicting geographic variation in malformation risk.

While contaminants have frequently been hypothesized to contribute directly to amphibian limb abnormalities, consistent with an extensive history of ecotoxicological research in the laboratory, few studies have thus far identified a link between measured or applied contaminants in the field and observed patterns of abnormalities in natural systems, particularly at large spatial extents (Ouellet et al., 1997; Taylor et al., 2005; Rohr et al.,

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2008a; Reeves et al., 2010; Bacon et al., 2013). In examining nine pesticides known to be harmful to amphibians across the conterminous USA, we found evidence for a main effect of pesticide application in predicting patterns of amphibian abnormalities in a wetland, which was significant in the Northeast and Southeast regions and marginally significant at the continental scale. Moreover, by carefully assembling a national-extent database on the distribution of oil and gas wells within the USA, we also detected a positive association between oil/gas activity and the prevalence of malformations at both the national extent and in the Pacific and Southeast regions specifically (although this association was reversed in the Northeast). Whether this pattern is causal or reflects links with unmeasured factors is unclear, but the connection between petroleum byproducts and amphibian development warrants further investigation. In a survey of National Wildlife Refuges, Ramirez and Mosley (2015) reported chronic oilfield and brine leaks, which may result in complex mixtures of petroleum hydrocarbons leaching into the environment (see also Vidic et al., 2013). Ongoing research at a series of wetlands in Bermuda further suggested a link between petrochemical and metal contamination in pond sediment and elevated frequencies of morphological abnormalities in toad and killifish populations (e.g., Bacon et al., 2013).

Among the subset of collections in which we also examined amphibians for trematode infection, average infection load by *R. ondatrae* predicted the frequency of malformations at the national extent and within the Pacific and Northeast regions specifically. These effects were intensity-dependent, such that higher levels of average infection were associated with a greater risk of malformation, which has also been reported experimentally and in studies from the western USA (e.g., Johnson et al., 2012, 2013). *R. ondatrae* infection has been linked to severe limb malformations in amphibians in previous experimental research and regional field surveys (Johnson et al., 1999, 2002, 2013; Stopper et al., 2002; Lunde et al., 2012; Roberts & Dickinson, 2012). Parasite-induced limb malformations are hypothesized to

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adaptively enhance transmission of *R. ondatrae* between its intermediate (amphibian) and definitive (bird) hosts, which depends on predation (Johnson et al., 2002, 2004), although considerable debate has focused on the potential for factors such as nutrient runoff or pesticides to amplify infection or its effects on frogs (Johnson & Chase, 2004; Rohr et al., 2008a).

Importantly, parasite load also interacted synergistically with the national-extent patterns of pesticide application to predict skeletal malformations in amphibians. While many studies have focused on specific factors, emerging evidence has highlighted the potential for additive or synergistic interactions among putative causes of abnormalities (Rohr et al., 2008a; Reeves et al., 2010, 2011; Johnson et al., 2013; Hayden et al., 2015). Several studies have identified such effects between parasites and pollutants, whereby increased runoff of biocides or nutrients amplifies parasite infection through complex ecological mechanisms (Johnson et al., 2007; Jayawardena et al., 2016). Rohr et al. (2008a, 2008b) found that the commonly applied herbicide atrazine and the fertilizer phosphate jointly predicted trematode abundance in amphibians from 18 agricultural wetlands in Minnesota. These synergistic effects were hypothesized to stem from pesticide-mediated decreases in host immunocompetency and nutrient-mediated amplification of trematode-infected snails, each of which were supported by corresponding experimental studies (Johnson et al., 2007; Rohr et al., 2008a). Similarly, Reeves et al. (2010) reported an association between toxicants and abnormal amphibians in Alaska, from which they suggested that contaminants (metals and pesticides) may inhibit larval amphibians' capacity to avoid attacks by dragonfly larvae that cause limb abnormalities (see also Ballengée & Sessions, 2009; Bowerman et al., 2010). Additional studies have shown how the threat of predation (visual and chemical cues) can indirectly increase trematode infections in amphibians through reductions in escape behaviors or stress-induced immune suppression (Thiemann & Wassersug, 2000; Marino & Werner, 2013).

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However, macroinvertebrate predators may also decrease trematode infections by consuming infected snails or the free-swimming parasite stages (cercariae) infectious to amphibians (Johnson et al., 2010b; Rohr et al., 2015), highlighting the potential complexity of ecological interactions in driving abnormal development in amphibians.

The large spatial extent of the current survey, which included 422 wetlands from 42 states, emphasized regional variation in the identity and relative influence of putative drivers of amphibian malformations. For instance, whereas infection by *R. ondatrae* has been linked to malformation hotspots in Canada, the western, midwestern, and northeastern United States (Johnson et al., 2002, 2013; Lannoo et al., 2003; Johnson & Hartson, 2009; Lunde et al., 2012; Roberts & Dickinson, 2012), it is absent from other sites and regions with a history of abnormalities, including Alaska, Vermont, and Bermuda (Skelly et al., 2007; Bacon et al., 2013; Reeves et al., 2013). For example, Reeves et al. (2008) examined 576 abnormal wood frogs in Alaska for *R. ondatrae* and found that none were infected. Such spatial non-stationarity is consistent with the findings of our region-specific analyses: while *R. ondatrae* infection was among the most significant correlates of malformations in the western and northeastern US, it was relatively unimportant in models for the Mountain Prairie region and Midwest, despite being widespread in the Midwest. *R. ondatrae* was also was not detected in any sites in the southwestern or southeastern USA, although the lower sample sizes in these regions leave open the question of whether it is absent or under-sampled (see also Johnson & McKenzie, 2009). Similar, region-specific effects associated with both pesticide application (in the Southeast and Northeast) and oil/gas well activity (Pacific, Southeast and Northeast regions) further help to characterize the malformation issue as a series of discrete phenomena rather than a single problem with a single solution. Whether the negative effect of oil/gas wells on malformations in the Northeast represents another example of spatial non-

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stationarity or instead stemmed from only two of the 10 Refuges having wells within their watershed will require further investigation.

Alongside the effects of spatial extent (national versus regional), our results also identified variation in supported covariates as a function of the dataset used: the full dataset involving all 934 collections or the subset of 154 that included examination for parasite infection. Specifically, the 'reduced dataset' in which we tested for parasite infection was also associated with stronger covariate effects from pesticide application and oil/gas well presence. These differences likely stem from at least two factors. First, by accounting for the influence of *R. ondatrae* infection on observed abnormalities, models involving the reduced dataset were able to partition out the added links with contaminants. Second, and perhaps most importantly, the subset of collections with parasite examination were not randomly selected; often they were from wetlands or populations at which abnormalities were detected, such that the mean malformation frequency was ~1.5 times greater (4.8% abnormal among parasite-examined collections versus 3.1% in the full dataset, when restricting to collections with ≥ 30 frogs). Thus, while the full dataset provided broader but coarser information into factors associated with abnormal amphibians, the parasite subset allowed us to specifically examine the influence of additional, site-specific hypotheses (e.g., *R. ondatrae* infection and its interaction with pesticides) among wetlands with non-zero malformation prevalence. An inherent challenge to this approach is that many of the potential causes of abnormal development in amphibians are themselves correlated in space and time. While we used multiple approaches to address collinearity, this nonetheless required that some covariates be removed from specific analyses (e.g., fertilizers or agricultural land use). The overall tendency in some regions for malformations to occur predominantly at wetlands with concurrent chemical and biological threats limited the capacity of models to rigorously discriminate among hypotheses, and especially their potential interactions (only a subset of

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which were tested here). For instance, some sites with high abnormality frequencies in the Southeast and Pacific regions had relatively high levels of agrochemicals (e.g., pesticide and fertilizer use) alongside oil/gas development in the watershed.

In light of the necessarily correlational relationships presented for analyses at such large geographic extents, we caution against strong causal inference and emphasize the potential for alternative explanations. Given the number of sampled wetlands it was not possible to quantify specific contaminants in the water, sediment, or frogs, such that our predictor variables represent proxies for contaminant exposure. Many studies have reported substantial variation in pesticide concentrations among aquatic sites, even at small scales, which is highly dependent upon watershed connectivity, drainage from agricultural lands, the types of crops cultivated, rainfall events, and the timing of amphibian activity (Smalling et al., 2015). Moreover, particular types of landscapes (e.g., agricultural areas) or county-level application of pesticides could correlate with other, unmeasured factors that influence observed abnormalities. For instance, we excluded fertilizer application from the analysis owing to its high collinearity with pesticide exposure and agricultural land use, leaving open the possibility that inferred linkages between abnormal frogs and pesticides were mediated through nutrient- rather than pesticide-based effects on parasites or tadpoles (Marco & Blaustein, 1999). And while we specifically aimed to incorporate variables previously shown or suspected to be linked to abnormalities in wildlife, some candidate factors do not have readily available data. For instance, detailed geographic information on the distribution and abundance of aquatic predators with the potential to cause amphibian limb abnormalities, including larval dragonflies, small fishes, and leeches (Ballengée & Sessions, 2009; Bowerman et al., 2010), are lacking for the continental USA generally and these wetlands specifically. Future efforts should also aim to make a more detailed examination as to how malformation types and frequencies vary with amphibian species or phylogenetic

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relationships, which are likely to influence both exposure and susceptibility to potential teratogens. Finally, despite the large scope of the geographic sampling program, all sites were from National Wildlife Refuges, Wetland Management Districts (WMD) or Waterfowl Production Areas (WPA), which may not be representative of other types of lands or properties.

Severe skeletal malformations, as well as their underlying drivers, have the potential to contribute to population declines of amphibians (Goodman & Johnson, 2011; Adams et al., 2013; Johnson et al., 2013), which have become the most imperiled class of vertebrates on earth (Stuart et al., 2004; Wake & Vredenburg, 2008; Hoffmann et al., 2010). Given that wildlife habitats are often simultaneously subjected to multiple threats, understanding the relative effects and interactions of co-occurring factors is essential for developing conservation and management plans to mitigate such declines and abnormalities. Amphibian limb development is an extremely plastic process subject to disruption by a wide variety of natural and anthropogenic agents (Ouellet, 2000). To our knowledge, this represents the first systematic, continental-extent analysis to evaluate the relative influence of multiple factors in driving amphibian abnormality patterns in nature. Our findings, while correlative, implicated additive and synergistic effects of trematode parasite infection and chemical contaminants, including both application of agrochemicals and presence of oil/gas wells in the watershed. We hope these findings catalyze additional investigations into the regional factors associated with above-baseline frequencies of malformations that ultimately identify how and why causative factors vary through space and time.

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Table 1 Model-averaged regression coefficients for analysis of amphibian skeletal malformation prevalence at national and regional spatial extents (only coefficients with $p \leq 0.10$ are shown; otherwise '—'). Coefficients with 95% confidence intervals (shown in parentheses) that do not include zero are denoted by bold format. The number of collection events included in each model is shown in parentheses. For continuous predictors, variables were scaled such that coefficients range between 0 and 1; for the factor predictor (oil/gas well presence), the variable was not scaled (such that coefficients cannot be directly compared between continuous and categorical variables). Significance codes are as follows: '***' ≤ 0.001; '**' ≤ 0.01; '*' ≤ 0.05; '·' ≤ 0.10. The models using all data (n=934 collections) do not include the parasite abundance covariate nor the parasite-by-pesticide interaction term.

	Parasite abundance	Parasites X Pesticides	O/G well presence	Pesticide exposure	Agriculture	Developed	Wetland
National							
Parasite data (n=154)	**0.27** (0.08 – 0.46)**	**0.20* (0.03 – 0.37)**	—	0.22· (-0.02 – 0.47)	—	—	—
All data (n=934)	NA	NA	**0.37* (0.05 – 0.68)**	—	—	—	—
Regional (parasite data)							
Pacific (n=26)	**0.46*** (0.27 – 0.64)**	—	**1.22* (0.04 – 2.41)**	—	—	—	—
Southwest (n=2)[a]	—	—	—	—	—	—	—
Midwest (n=30)	—	—	—	—	—	—	—
Southeast (n=13)[b]	NA[c]	NA[c]	**1.78*** (0.82 – 2.74)**	**0.49* (0.04 – 0.94)**	NA[d]	—	—
Northeast (n=61)	**0.47*** (0.22 – 0.71)**	—	**-1.48*** (-2.36 – -0.60)**	**0.51* (0.09 – 0.92)**	NA[d]	NA[d]	—
Mountain Prairie (n=22)	—	—	—	—	NA[d]	NA[d]	—
Regional (all data)							
Pacific (n=99)	NA	NA	**0.83* (0.12 – 1.54)**	—	—	—	—
Southwest (n=117)	NA	NA	—	—	—	—	—
Midwest (n=176)	NA	NA	—	—	—	—	NA[d]

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Southeast (n=233)	NA	NA	—	—	NA[d]	—	**-0.49*** (-0.78 – -0.23)**
Northeast (n=189)	NA	NA	—	0.30 · (-0.02 – 0.61)	NA[d]	—	—
Mountain Prairie (n=120)	NA	NA	—	—	NA[d]	—	—

[a] The Southwest regional model was omitted because too few sites included data on parasite infection in this region.
[b] We used a generalized linear model rather than a generalized linear mixed model because the random intercept terms had variance values approaching zero, coupled with the small sample size in this region.
[c] Parasite infection was not detected in the Southeast region.
[d] Variables excluded due to multicollinearity (see Appendix S4).

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Table 2 Best-supported information-theoretic models (within 2 ΔAIC_C) for amphibian malformation prevalence. For each model, 'k' is the number of parameters[a], AIC_C is Akaike's information criterion corrected for small sample size, ΔAIC_C is the difference in AIC_C between the lowest ranked model and the model under examination and w_i is the Akaike weight. The models using all 934 collections do not include the parasite abundance covariate nor the parasite-by-pesticide interaction term. See Appendix S6 for all models within 4 ΔAIC_C.

Spatial Extent	Model	k	AIC_C	ΔAIC_C	w_i
National					
Parasite data (n=154)	parasite-by-pesticide	3	697.28	—	0.71
All data (n=934)	oil/gas well presence	1	2866.7	—	0.31
	chemical contaminants	2	2868.3	1.63	0.14
	global	5	2868.5	1.78	0.13
	wetland	1	2868.7	1.94	0.12
Regional – parasite data					
Pacific (n=26)	parasite abundance	1	137.51	—	0.98
Mountain Prairie (n =22)	null (intercept only)	—	94.39	—	0.56
Southwest (n=2)[b]	—	—	—	—	—
Midwest (n=30)	null (intercept only)	—	142.57	—	0.30
	oil/gas well presence	1	143.91	1.34	0.15
	development	1	144.21	1.64	0.13
Southeast (n=13)[c]	chemical contaminants	2	63.21	—	0.84
Northeast (n=61)	global	4	268.69	—	0.74
Regional – all data					
Pacific (n=99)	oil/gas well presence	1	397.76	—	0.42
	chemical contaminants	2	399.24	1.47	0.20
Mountain Prairie (n=120)	development	1	358.38	—	0.33
	null (intercept only)	—	358.95	0.57	0.25
Southwest (n=117)	null (intercept only)	—	168.32	—	0.30
	agriculture	1	169.76	1.43	0.15
	development	1	169.79	1.46	0.14
	wetland	1	170.02	1.70	0.13
	pesticide exposure	1	170.23	1.91	0.11
Midwest (n=176)	null (intercept only)	—	616.97	—	0.32
	development	1	618.21	1.24	0.17
	pesticide exposure	1	618.72	1.74	0.13
	agriculture	1	618.78	1.80	0.13
Southeast (n=233)	wetland	1	686.79	—	0.49
	global	4	687.65	0.86	1.32
Northeast (n=189)	pesticide exposure	1	640.30	—	0.40
	null (intercept only)	—	641.79	1.48	0.19
	chemical contaminants	2	642.21	1.90	0.15

[a] The number of parameters within a candidate model category (e.g., global) can vary due to some variables being omitted following multicollinearity checks.
[b] The Southwest regional model was omitted because too few sites included data on parasite infection in this region.

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[c] We used a generalized linear model rather than a generalized linear mixed model because the random intercept terms had variance values approaching zero, coupled with the small sample size in this region

Figure Captions

Fig. 1 Geographical distribution of the percentage of amphibians exhibiting skeletal malformations from field collections across the conterminous USA. Here we only show data from the 620 collections with at least 30 individuals surveyed. Averages are shown for wetlands with multiple collection events. Histograms display relative frequencies of the percentage of malformed individuals across all collections within USFWS administrative regions (we adopted the former USFWS classification scheme that combined Region 1 and 8 in order to achieve greater balance in sampling coverage across the USA). Dashed lines show the average percentage of malformed individuals across all collections within each region (the number of collections is shown in parentheses).

Fig. 2 Model-averaged regression coefficients for analysis of amphibian skeletal malformation prevalence at national and regional extents, using (a) the 154 collections containing parasite infection data, and (b) all 934 collections (excluding the parasite abundance and parasite-by-pesticide interaction covariates). Point estimates for each spatial extent are shown with 95% confidence intervals; asterisks denote 95% CIs that exclude zero. Covariates include parasite abundance ("Par"), a parasite-by-pesticide interaction term ("Int"), pesticide exposure ("Pest"), and proportion of agricultural ("Ag"), developed ("Dev") or wetland land use/cover ("Wet"). Spatial extents include national ("N"), Pacific ("1"), Southwest ("2"), Midwest ("3"), Southeast ("4"), Northeast ("5"), and the Mountain Prairie ("6") regions. For continuous predictors, variables were scaled such that coefficients range between 0 and 1; for the factor predictor (oil/gas well presence), the variable was not scaled (such that coefficients cannot be directly compared between continuous and categorical variables). The Southwest regional model was omitted when using the parasite data set due to small sample size. For some regions, certain covariates were excluded owing to high correlations with other variables (see Table 1, Appendix S4).

Supporting Information

Additional Supporting Information may be found in the online version of this article.

Appendix S1. Species identity and number included of the 41 amphibian species surveyed in this study.

Appendix S2. Description of the selection criteria used to create the pesticide exposure variable.

Appendix S3. Description of data acquisition and cleaning procedures undertaken to create the oil/gas well variable.

Appendix S4. Description of additional analytical procedures implemented.

Appendix S5. Maps displaying the spatial variability of each predictor variable across the conterminous USA.

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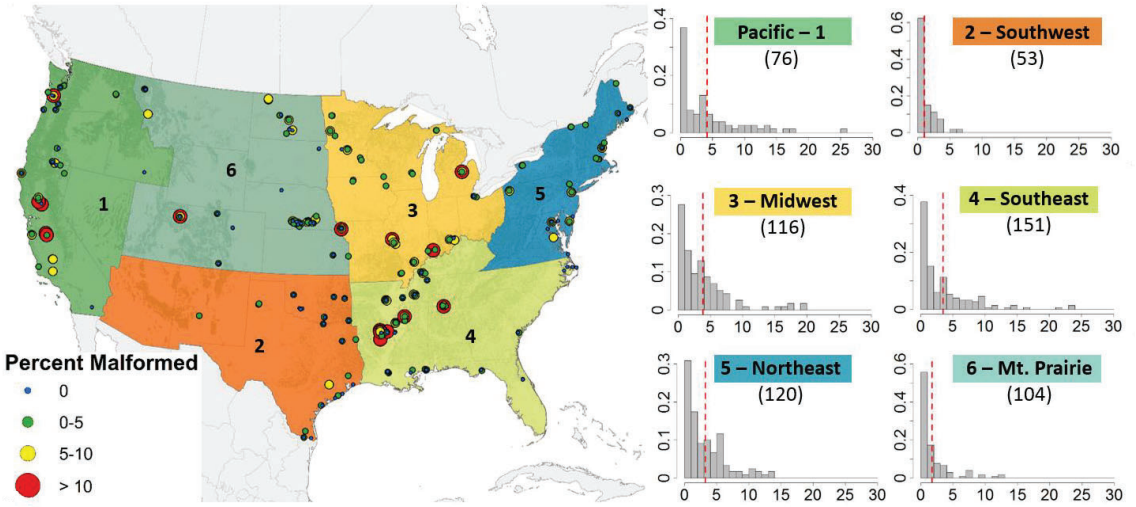
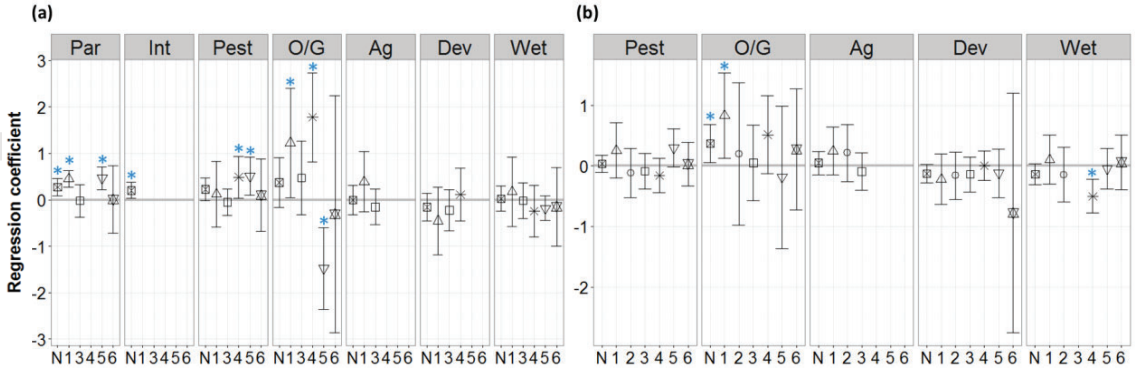
Appendix S6. Best-supported information-theoretic models within Δ 4 AIC_C for amphibian malformation prevalence.





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From:	Kashyap Patel
To:	Aurelia Skipwith
Cc:	Greg Sheehan; Jim Kurth; Stephen Guertin; Maureen Foster; Morris, Charisa
Subject:	Congressional Correspondence Trackers
Date:	Thursday, June 14, 2018 2:28:49 PM
Attachments:	June 12 EXEC SEC Overdue Report (1).rtf FWS Congressional Correspondence Tracker 6-12-18.docx

---

Hi Aurelia,

Please find attached both the Exec Sec and FWS congressional correspondence status reports.

Thanks,
Kashyap

--
Kashyap_Patel@fws.gov | acting Deputy Chief of Staff, Office of the Director | U.S. Fish & Wildlife Service | 1849 C Street NW, Room 3348 | Washington, DC 20240 | (202) 208-4923 | Txt/Cell: 703-638-4640

FISH AND WILDLIFE SERVICE

Executive Secretary Office

Date: 06/12/2018

DCN	Es No	Subject	Asgnd Date	ES Due	DCN Due	Sig	Asgnd To	Task	Addressee
		OVERDUE							
Nonresponsive Records		[redacted]							
EST-00008654		Ban on use of genetically modified (GMO) seed by commercial agriculture on national wildlife refuges	06/11/2018	07/02/2018	07/02/2018	A/S	CCU-OES	Prepare Draft Response	Abraham (Draft Due end of June)

U.S. Fish and Wildlife Service Office of Congressional and Legislative Affairs
Status of Congressional Correspondence

June 12, 2018

Cleared FWS – With DOI
With FWS

DCN	EST	Package Title	From (lead office)	To	Letter Date	Date Loaded into DTS	Date Due	Status
Nonresponsive Records								

DCN	EST	Package Title	From (lead office)	To	Letter Date	Date Loaded into DTS	Date Due	Status
Nonresponsive Records								

DCN	EST	Package Title	From (lead office)	To	Letter Date	Date Loaded into DTS	Date Due	Status
[redacted]	[redacted]	Nonresponsive Records [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
068320	8654	Ban on use of genetically modified (GMO) seed by commercial agriculture on national wildlife refuges	Abraham	Sec. Zinke	5/8/18	6/12/18	7/2/18	FWS Refuges since 6/12/18.

From: gregory_sheehan@fws.gov on behalf of Sheehan, Greg
To: Susan Combs
Subject: letter
Date: Tuesday, July 31, 2018 2:33:25 PM
Attachments: Withdrawal Memp of 2014 Kurth Memo.SOL edit draft (2).docx

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--
Greg Sheehan
Principal Deputy Director
US Fish and Wildlife Service
1849 C Street NW, Room 3358
Washington, DC 20240
Office 202-208-4545
Cell 202-676-7675

PRIVILEGED ATTORNEY CLIENT COMMUNICATION/FOIA EXEMPT/PRE-DECISIONAL

[DATE]

Memorandum

To: Service Directorate

From: Principal Deputy Director

Subject: Withdrawal of Memorandum Titled, "Use of Agricultural Practices in Wildlife Management in the National Wildlife Refuge System" (July 17, 2014)

(b) (5) DPP, (b) (5) ACP, (b) (5) AWP

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[redacted]

From: Romanik, Peg
To: Greg Sheehan
Cc: Benjamin Jesup; Brown-Kobil, Nancy; Kyle Scherer
Subject: gmo
Date: Tuesday, July 24, 2018 5:24:09 PM
Attachments: Withdrawal Memp of 2014 Kurth Memo.July 2018 draft framework.docx

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(b) (5) DPP, (b) (5) ACP, (b) (5) AWP

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[redacted]

If you have any questions, let us know. Once this memo is ready for surname, please enter it into DTS and have your folks send it to Ben or me directly - that will be the quickest way to get a surname.

Peg

Peg Romanik
Associate Solicitor
Division of Parks and Wildlife
Office of the Solicitor
U.S. Department of the Interior
Office: (202)208-5578
Cell: (202)515-1000

PRIVILEGED ATTORNEY CLIENT COMMUNICATION/FOIA EXEMPT/PRE-DECISIONAL

[DATE]

Memorandum

To:

From: Principal Deputy Director

Subject: Partial Withdrawal of Memorandum Titled, "Use of Agricultural Practices in Wildlife Management in the National Wildlife Refuge System" (July 17, 2014)

(b) (5) DPP, (b) (5) ACP, (b) (5) AWP

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PRIVILEGED ATTORNEY CLIENT COMMUNICATION/FOIA EXEMPT/PRE-DECISIONAL

(b) (5) DPP, (b) (5) ACP, (b) (5) AWP

[redacted]

DRAFT

From:	Robbins, Tasha
To:	Ryan Hambleton; Greg Sheehan
Cc:	Roslyn Sellars
Subject:	Fwd: Asst Secretary Meeting with the SOI July 31
Date:	Monday, July 30, 2018 3:05:58 PM
Attachments:	ASFWP Monthly Meeting 2018-07-16.docx

Susan asked that I send this to you.

Thanks,

---------- Forwarded message ----------
From: **Powell, Christine** <chris_powell@nps.gov>
Date: Mon, Jul 30, 2018 at 4:00 PM
Subject: Asst Secretary Meeting with the SOI July 31
To: Tasha Robbins <tasha_l_robbins@ios.doi.gov>

Christine Powell
Acting Chief of Staff
(o) 202-513-7181
(c) 202-878-2309

--

Tasha L. Robbins
Executive Assistant
Office of the Assistant Secretary
for Fish and Wildlife and Parks
1849 C Street, NW, Room 3160
202-208-4416

Tasha_l_Robbins@ios.doi.gov

United States Department of the Interior
Washington, D.C. 20240
ASSISTANT SECRETARY MONTHLY MEETING WITH THE SECRETARY

DATE: July 31, 2018 **TIME:** 11:00 am
FROM: Susan Combs, Senior Advisor to the Secretary, exercising the authority of the Assistant Secretary for Fish and Wildlife and Parks
SUBJECT: Monthly Meeting
DOI Staff Participating: David Bernhardt, Todd Willens, Scott Hommel, Downey Magallanes, Dan Smith, Greg Sheehan

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[redacted]

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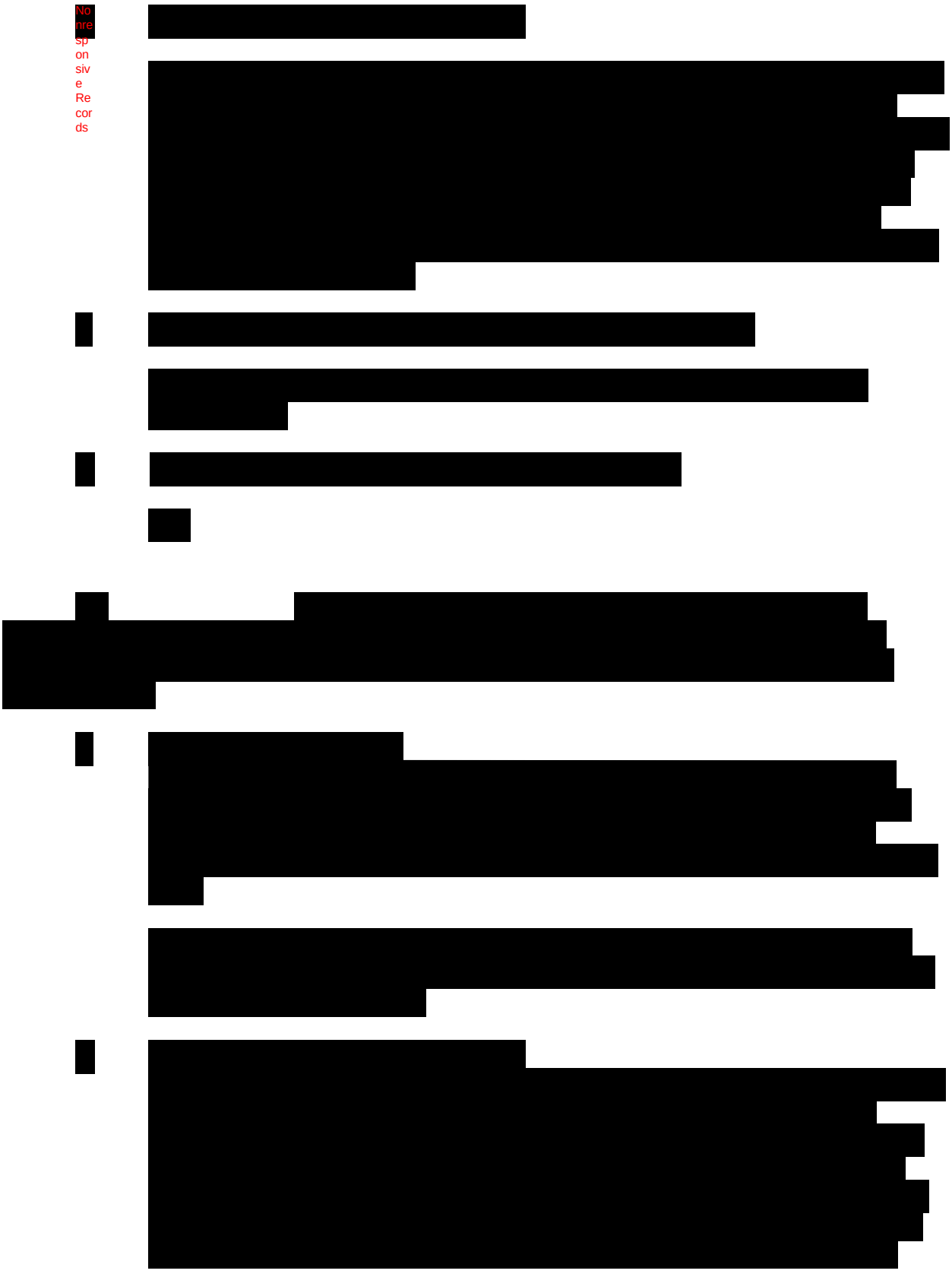
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VIII. GMO CROPS POLICY

FWS is reversing the decision to universally ban the use of genetically modified organisms (GMO) crops and certain pesticides on refuges to allow the National Wildlife Refuge System to determine the appropriateness of their use on a case-by-case basis.

a. ISSUE BACKGROUND

On July 21, 2014, the Chief of the National Wildlife Refuge System (NWRS) issued a memorandum phasing out the use of GMOs and certain pesticides. However, throughout the expansion of the National Wildlife Refuge System (NWRS), many Refuges were acquired for the purposes of specifically benefiting and enhancing waterfowl and other migratory bird species. Further, in recognition of te need to provide adequate forage for waterfowl and migratory birds many Refuges historically, and currently, maintain active farming practices that produce a variety of crops to support birds and other species. Our current blanket denial of GMOs does not provide on-the-ground latitude for refuge managers to work adaptively and make field level decisions about the best manner to fulfill the purposes of the refuge.

b. ACTIONS TAKEN BY THE HALLWAY

FWS is issuing a memorandum from the Principal Deputy Director to the Directorate to allow the use of GMO seeds. Refuges with lands mandated by law for agricultural purposes may explore options for GMO seed use after a NEPA review process.

c. RECOMMENDATION BY THE DEPUTY SECRETARY

N/A

d. ACTION ITEM FOR SECRETARY (if applicable)

N/A

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From: Willens, Todd
To: Casey Hammond; Greg Sheehan
Subject: Fwd: Blackwater GMO Issue
Date: Thursday, July 20, 2017 12:24:42 PM

Greg and Casey,

Can we ask Refuges about this in order to understand the current crop management at the Refuge? what considerations are on the table to attract waterfowl and deer populations?

Thanks.

Todd Willens
Assistant Deputy Secretary
Acting Assistant Secretary for Fish and Wildlife and Parks
U.S. Department of the Interior
1849 C Street, NW -- MIB Room 6116
Washington, DC 20240
office: 202-208-6291

---------- Forwarded message ----------
From: **John Mautz** (b) (6) [redacted]
Date: Thu, Jul 20, 2017 at 12:30 PM
Subject: Blackwater GMO Issue
To: "todd_willens@ios.doi.gov" <todd_willens@ios.doi.gov>
Cc: Kiko Michael <mkiko@house.state.md.us>

The GMO issue is a significant issue in the Blackwater Refuge area, located in Dorchester County on Maryland's Eastern Shore.

We have participated in several meetings where this issue has been discussed with Refuge management, local stakeholders and members from our Migratory Game Bird Advisory Committee. There's an old bit of humor in that some have said the land is "one foot too high to grow oysters and one foot too low to grow corn." The reality is that the farmland is very viable - literally across the "country road" from a desolate crop on Refuge land there are private farm fields filled with vibrant crops.

We are deeply concerned that the lack of food from the desolate crop in Refuge fields has been a large contributor to the declining number of waterfowl that are migrating to the refuge. Meanwhile, local landowners are very concerned because many of the deer and other animals that live on the Refuge are seeking private farm fields, which are planted with GMO seed, for food and are causing widespread crop depredation. In addition, the entire region surrounding the refuge is utilizing an environmentally sound and productive seed that has

proven to produce strong yields, year after year.

If we may be of any assistance, please feel free to reach me via my personal email or my personal phone (b) (6) This is a very important issue and we greatly appreciate your attention.

Kind regards,

Johnny Mautz

Maryland House of Delegates, Dist. 37B

Member - Economic Matters Committee

From: Hommel, Scott
To: Greg Sheehan
Cc: Todd Willens
Subject: Fwd: Fw: please be aware of the attached letter to Sec. Zinke
Date: Monday, October 2, 2017 9:56:19 AM
Attachments: 0000 Zinke FINAL w signatures .pdf

FYI
---------- Forwarded message ----------
From: **Val Giddings** (b) (6) >
Date: Mon, Oct 2, 2017 at 10:08 AM
Subject: Fw: please be aware of the attached letter to Sec. Zinke
To: "scott_hommel@ios.doi.gov" <scott_hommel@ios.doi.gov>

Scott,

I wanted to make sure the Secretary is not surprised when we make the attached letter public tomorrow morning. In it we ask Sec. Zinke to reverse an ill considered policy improperly adopted by the previous Administration. We would be happy to discuss with you or other relevant staff at your convenience.

Many thanks!

Val

L. Val Giddings, Ph. D.

Senior Fellow, Information Technology & Innovation Foundation

vgiddings@itif.org

(b) (6)

From: Val Giddings (b) (6)
Sent: Friday, September 29, 2017 5:20 PM
To: Thomas_Garcia@nps.gov
Cc: Aurelia_Skipwith@nps.gov; Lindsay Bembenek

Subject: please be aware of the attached letter to Sec. Zinke

Dear Thomas,

Many thanks for taking the time to chat briefly with me earlier this afternoon.

As I mentioned, I'd like to give you advance notice of something we expect will happen next week.

I am a Senior Fellow with the Information Technology and Innovation Foundation (https://itif.org/person/val-giddings). We are a policy based think tank here in Washington. We plan to send the attached letter to Sec. Zinke next Tuesday, and to publicize it through a press release and social media. As this falls within Dep. Assistant Secretary Skipwith's portfolio and stewardship, we wanted to make sure you are not surprised.

Our letter requests Sec. Zinke to vacate an ill-considered policy adopted improperly by the previous administration. Some background can be found here https://www.innovationfiles.org/gmos-neonicotinoids/.

We would be happy to discuss this with you, Deputy Assistant Secretary Skipwith, and any other interested staff. Please let us know if you have any questions.

Sincerely,

L. Val Giddings

vgiddings@itif.org

(b) (6)

ITIF | INFORMATION TECHNOLOGY & INNOVATION FOUNDATION

September 26, 2017
The Honorable Ryan Zinke, Secretary
Department of the Interior
1849 C Street, N.W.
Washington DC 20240

Dear Secretary Zinke,

We are a group of independent scientists joining with the Information Technology and Innovation Foundation, an independent think tank focused on innovation and public policy, writing to bring your attention to, and to ask you to reverse, a policy improperly adopted by the Fish and Wildlife Service three years ago that runs counter to its mission.[1]

On July 17, 2014, the Chief of the National Wildlife Refuge System (NWRS) made public a memo through which the use of "genetically modified" seeds to raise crops to feed wildlife was to be phased out as of January, 2016, as well as any use of neonicotinoid pesticides.[2]

While this action has been criticized by scientists who specialize in this field, it has not been widely noted.[3] It would appear to be a major federal action that should have been adopted through a notice-and-comment rulemaking process under the Administrative Procedure Act.[4] But even setting aside this apparent procedural irregularity, the policy is at odds with the conservation objectives of the NWRS, which has a long and

[1] The Information Technology and Innovation Foundation (ITIF) is a nonpartisan think tank whose mission is to formulate and promote public policies to advance technological innovation and productivity internationally, in Washington, and in the states, and around the world. Recognizing the vital role of technology in ensuring prosperity, ITIF focuses on innovation, productivity, and digital economy issues, with policies impacting biotechnology and biological sciences as a core concern.
[2] Memorandum from James W. Kurth, Chief of the National Wildlife Refuge System, to Regional Refuge Chiefs, Regions 1-8, Regarding "Use of Agricultural Practices in Wildlife Management in the National Wildlife Refuge System," July 17, 2014, http://www.centerforfoodsafety.org/files/agricultural-practices-in-wildlife-management_20849.pdf.
[3] L. Val Giddings, "GMOs, Neonicotinoids, and Aldo Leopold's Land Ethic: The Fish & Wildlife Service Brings a 'Whole Foods' Approach to Wildlife While Shooting Itself in Our Foot," Information Technology and Innovation Foundation, *Innovation Files,* October 21, 2014, https://www.innovationfiles.org/gmos-neonicotinoids/.
[4] Public Law 404, June 11, 1946, http://www.legisworks.org/congress/79/publaw-404.pdf

praiseworthy history of welcoming innovation in management practices for the betterment of wildlife and the environment.[5] It should be reversed.

The optimal methods of agricultural production on refuge lands devoted to that purpose are those that produce the maximum sustainable yields with the minimum environmental impact. Obsolete production methods, no matter how innovative they might have been thousands of years ago, are not, today, "green" in any sense.[6] They produce vastly less than modern techniques, requiring much more land to produce the same harvest, thus consuming far more space that could otherwise be directly allocated for wildlife habitat than modern varieties. The superiority of modern crop varieties (e.g., genetically modified organisms or GMOs) in this regard has been demonstrated time and time again.[7] The prohibition of "genetically modified" crops is a wrong-headed and anti-environmental policy, and the conceit that it is being advanced out of respect for a "land ethic" is indefensible.

That the use of "genetically modified" has been forbidden by the NWRS chief is arbitrary and capricious on several grounds, starting with the fact that all seeds are genetically modified, both through historical processes of domestication and crop improvement, to say nothing of the universal process of descent with genetic change that is the *sine qua non* of all life on earth. The term "GMO" is inaccurately and wrongly used to stigmatize a subset of seeds produced with the most modern, precise, efficient and effective methods of seed improvement. This is inconsistent with the scientific consensus.[8] The Chief's proscription of the use of such seeds appears to be based on an unsupported assumption of potential negative consequences to wildlife

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[5] U.S. Fish and Wildlife Service, "History of the National Wildlife Refuge System," https://www.fws.gov/refuges/history/index.html; Juliet Lamb, "The History of the National Wildlife Refuge System," *JSTOR Daily*, February 4, 2016, https://daily.jstor.org/history-national-wildlife-refuge/.

[6] Bill O'Brian, "Hardy Corn with Deep (Cultural) Roots," USFWS, NWRS website, March 4, 2012, https://www.fws.gov/refuges/RefugeUpdate/MarApr_2012/hardycorn.html.

[7] Graham Brookes and Peter Barfoot, "Environmental Impacts of Genetically Modified (GM) Crop Use 1996–2015: Impacts on Pesticide Use and Carbon Emissions," *GM Crops & Food*, Volume 8, 2017 - Issue 2, Pages 117-147, http://www.tandfonline.com/doi/abs/10.1080/21645698.2017.1309490; and Wilhelm Klümper and Matin Qaim, "A Meta-Analysis of the Impacts of Genetically Modified Crops," *PLoS ONE* 9(11): e111629. doi:10.1371/journal.pone.0111629, http://journals.plos.org/plosone/article/file?id=10.1371/journal.pone.0111629&type=printable.

[8] Giovanni Tagliabue, "The Necessary 'GMO' Denialism and Scientific Consensus," *J. Science Communication* 15(04) 2016, https://jcom.sissa.it/sites/default/files/documents/JCOM_1504_2016_Y01.pdf.

conservation and biodiversity that is robustly contradicted by data and experience.[9] As numerous expert bodies have found, and as has been corroborated by vast experience, the safety of these seeds is clear and the beneficial impacts on agricultural sustainability significant.[10]

As for the Chief's arbitrary ban on the use of neonicotinoid pesticides, if the purpose of growing a crop is to produce a harvest sufficient directly to nourish, for example, migratory waterfowl, then their use to optimize productivity of seeds treated with pesticides that are less toxic than their predecessors or alternatives would seem to be logical, praiseworthy, and essential good stewardship of the land. The NWRS Chief cited concerns over potential impacts on non-target species, so let us consider that. We know neonics are kinder to birds and vertebrates than the alternatives. But what about endangered insects?

Some have made the argument that neonics may be contributing to declines in some threatened native prairie butterfly populations in the Great Lakes region. This argument is made in a webinar featuring Lisa Williams, the Branch Chief for Environmental Contaminants in the East Lansing Field Office of the U.S. Fish and Wildlife Service.[11] Dr. Williams sees a correlation between areas of neonic use and the habitat distribution and declining numbers over time of the Poweshiek Skipperling and the Dakota Skipper, both candidates for listing as endangered species. She argues from this correlation that neonics should thus be banned from use throughout the NWRS.

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[9] Klümper and Qaim, "Meta-Analysis of Impacts of GM Crops; National Academies of Sciences, Engineering, and Medicine, 2016," *Genetically Engineered Crops: Experiences and Prospects*. Washington, DC: The National Academies Press. https://doi.org/10.17226/23395, https://www.nap.edu/catalog/23395/genetically-engineered-crops-experiences-and-prospects; William Saletan, "Unhealthy Fixation: The War Against Genetically Modified Organisms Is Full of Fearmongering, Errors, and Fraud-Labeling. Labeling Them Will not Make You Safer," July 15, 2015, *Slate*, http://www.slate.com/articles/health_and_science/science/2015/07/are_gmos_safe_yes_the_case_against_them_is_full_of_fraud_lies_and_errors.html; A. Nicolia, A. Manzo, F. Veronesi, et al., "An Overview of the Last 10 Years of Genetically Engineered Crop Safety Research," *Crit Rev Biotechnol.* 2014 Mar;34(1):77-88. doi: 10.3109/07388551.2013.823595. Epub 2013 Sep 16, https://www.ncbi.nlm.nih.gov/pubmed/24041244.

[10] Brookes and Barfoot, ibid; Alison L. Van Eenennaam, and A. E. Young, "Prevalence and Impacts of Genetically Engineered Feedstuffs on Livestock Populations," *J. Anim. Sci.,* 2014, 92:4255-4278. doi:10.2527/jas.2014-8124, https://www.animalsciencepublications.org/publications/jas/articles/92/10/4255; Daniel Norero, "More Than 280 Scientific and Technical Institutions Support the Safety of GM Crops," June 19, 2017, *Si Quiero Transgenicos,* http://www.siquierotransgenicos.cl/2015/06/13/more-than-240-organizations-and-scientific-institutions-support-the-safety-of-gm-crops/.

[11] U.S. Fish & Wildlife Service, "Neonicotinoid Insecticides: Increasing Usage and Potential Threats," April 29, 2014, https://digitalmedia.fws.gov/cdm/ref/collection/video/id/1923

As Williams herself admits, this is an argument from correlation, and better data are needed to establish cause and effect. But even if we suppose such data exist, or can be produced, they could not justify a system-wide ban. The National Wildlife Refuge system is vast, involving all 50 states and territories. The butterflies of interest, though once more widespread, are now limited to relics of prairie habitat in a small portion of the country, the remainder of which is outside the historical range of the species of concern and throughout which very different conditions apply. A blanket neonic ban makes no sense, and cannot be justified.

We therefore ask that the Department of Interior vacate the NWRS Chief's policy decision to prohibit the use of "GM" seeds on refuge lands and instead to use them wherever improved agricultural productivity and sustainability would contribute to the Agency's conservation mission. We ask also that the blanket ban on neonicotinoid treated seed be rescinded, and a case by case evaluation be instituted that would allow for their use except where they pose a credible threat to endangered species.

Sincerely,

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Identification of signatories from organizations other than ITIF is for informational purposes only and does not indicate any institutional endorsement.

From:	Morris, Charisa
To:	Greg Sheehan; Jim Kurth; Stephen Guertin; Barbara Wainman
Cc:	Kashyap Patel; Randolph, Nikki
Subject:	Fwd: Overdue Reports
Date:	Monday, July 9, 2018 10:26:14 AM
Attachments:	NPS noncong overdue July 6.pdf FWP noncong overdue July 6.pdf NPS cong overdue July 6.pdf FWS cong overdue July 6.pdf

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Great news!

Nothing is late because of us. Pretty much all with SOL or OCL.

We continue to rock.

---------- Forwarded message ----------
From: **Howarth, Robert** <robert_howarth@ios.doi.gov>
Date: Sun, Jul 8, 2018 at 8:22 AM
Subject: Overdue Reports
To: Maureen Foster <maureen_foster@ios.doi.gov>, "Powell, Christine" <chris_powell@nps.gov>, Charisa Morris <charisa_morris@fws.gov>
Cc: Doris Lowery <doris_lowery@nps.gov>, "Randolph, Nikki" <nikki_randolph@fws.gov>, Scott Hommel <scott_hommel@ios.doi.gov>, Downey Magallanes <downey_magallanes@ios.doi.gov>, Juliette Lillie <juliette_lillie@ios.doi.gov>, Lisa M Cannuscio <Lisa_Cannuscio@ios.doi.gov>

Good morning. Attached are this week's overdue correspondence reports.

Rob

--
Robert Howarth
Deputy Director for Correspondence and FOIA Management
Office of the Executive Secretariat and Regulatory Affairs
Department of the Interior
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Charisa_Morris@fws.gov | Chief of Staff, Office of the Director | U.S. Fish & Wildlife Service | 1849 C Street NW, Room 3348 | Washington, DC 20240 | (202) 208-3843 | For urgent matters, please dial cell: 301-875-8937

UNITED STATES DEPARTMENT OF THE INTERIOR
EXECUTIVE SECRETARIAT CORRESPONDENCE MANAGEMENT SYSTEM

NON-CONGRESSIONAL OVERDUE REPORT NPS

AS OF 07/08/2018

AO	ACCN	SRC	DUE DATE	FROM	SUBJECT	SIG	STATUS
Nonresponsive Records							

Totals For NPS 1

UNITED STATES DEPARTMENT OF THE INTERIOR
EXECUTIVE SECRETARIAT CORRESPONDENCE MANAGEMENT SYSTEM

NON-CONGRESSIONAL OVERDUE REPORT FW

AS OF 07/08/2018

AO	ACCN	SRC	DUE DATE	FROM	SUBJECT	SIG	STATUS
Nonresponsive Records							

Totals For FW 1

UNITED STATES DEPARTMENT OF THE INTERIOR
EXECUTIVE SECRETARIAT CORRESPONDENCE MANAGEMENT SYSTEM

CONGRESSIONAL AND GUBERNATORIAL OVERDUE REPORT NPS

AS OF 07/08/2018

AO	ACCN	SRC	DUE DATE	FROM	SUBJECT	SIG	STATUS

Nonresponsive Records

[redacted]

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AS OF 07/08/2018

AO	ACCN	SRC	DUE DATE	FROM	SUBJECT	SIG	STATUS
				Nonresponsive Records [redacted]			

Totals For NPS 12

UNITED STATES DEPARTMENT OF THE INTERIOR
EXECUTIVE SECRETARIAT CORRESPONDENCE MANAGEMENT SYSTEM

CONGRESSIONAL AND GUBERNATORIAL OVERDUE REPORT FWS

AS OF 07/08/2018

AO	ACCN	SRC	DUE DATE	FROM	SUBJECT	SIG	STATUS

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CONGRESSIONAL AND GUBERNATORIAL OVERDUE REPORT FWS

AS OF 07/08/2018

AO	ACCN	SRC	DUE DATE	FROM	SUBJECT	SIG	STATUS
Nonresponsive Records							
FWS	EST-00008654	CM	07/02/2018	Abraham, Ralph; Gosar, Paul; Palazzo, Steven; Kelly, Trent; Marshall, Roger; Norman, Ralph; Smith, Adrian; King, Steve; Harris, Andy; Crawford, Rick; Gianforte, Greg; Yoho, Ted S; Comer, James; Estes, Ron; Bost, M ke; Noem, Kristi; Westerman, Bruce	Ban on use of genetically modified (GMO) seed by commercial agriculture on national wildlife refuges. Section 3.15(c)	A/S	07/06/2018 with Chief, ANRS for surname

Totals For FWS 9