

Appendix D: Watershed Approach to Floods

Cover Letter

There's more than one way to mitigate flooding.

Although building expensive levees, dams, and other structures often seems to be the first approach, we also should look at a parallel course of action to reduce the causes of the high water those structures are expected to contain.

As we discussed in our recent "Cedar Rapids Gazette" op-ed, we could address the causes of floods by promoting a long-term move toward perennial agriculture. That eventually would re-create the "sponge" that historically absorbed rainwater and held it on and in the land, rather than rushing it away to flood downstream neighbors. This sponge model of agriculture, with a complex of perennial vegetation that may reach 30 feet from the deepest roots to the above-ground tops, would mimic the historic prairie, woodland, savannah, and wetland landscape of Iowa.

Changes in the federal farm bill could help accomplish that goal. We propose that this body use its political capital to help begin that process. Since this doesn't involve the expenditure of money, you could start without waiting for some new tax vehicle, as you must do with pumps and levees.

With that in mind, we have formalized and expanded our op-ed. The package we hope you'll consider includes our op-ed and a PowerPoint based on the op-ed. We also asked a retired city administrator to prepare an outline/guideline that translates our op-ed into a form and language that this body might use in contemplating action on our proposal.

The package contains documents explaining elements of the op-ed. We have included several academic and scientific studies, along with materials putting the op-ed in context. We hope this information will encourage you to adopt the suggested parallel course of action toward flood reduction.

We believe it's in your self-interest to consider measures to help change the farm bill to encourage a move toward agricultural practices that can store water in place in the watershed, rather than sending that water downstream to you and your neighbors.

We would urge you to contact your Senators and Congressmen to support those changes:

Senator Charles Grassley: 319-363-6832
Senator Tom Harkin: 202-224-3254
Representative Dave Loebsack: 202-225-6576
Representative Bruce Braley: 202-225-2911
Representative Tom Latham: 202-225-5476
Representative Steve King: 202-225-4426
Representative Leonard Boswell: 202-225-3806

Although you may be asking Congressional support because of your direct concerns about protecting your city and county from flooding, there are many other positive benefits that could result from farm bill incentives to promote perennial agriculture:

For example:

- * **Reduced soil erosion.**
- * **Restoring the soil's water storage capacity and soil organisms.**
- * **Less water pollution** from soil erosion carrying sediment, nitrogen, phosphorus, fecal bacteria.
- * **Reduction of the Dead Zone** in the Gulf of Mexico, because of less agricultural run-off.
- * **Aid State of Iowa regulators** in antidegradation efforts for our surface waters.
- * **Less air pollution** from wind erosion of soil; from volatilization of fertilizers, pesticides and herbicides; from confinements and feedlots.
- * **Reduced Nitric acid rain**, which is from the volatilization of anhydrous ammonia fertilizer and from ammonia produced in confinements and feedlots.
- * **Human health benefits** from fewer particulates and poison gases - hydrogen sulfide, ammonia, methane - which now are coming from feedlots and confinements 24/7, 365 days a year.
- * **Reduced use of antibiotics and hormones** in livestock when the animals are removed from confinements. This would decrease potential water pollution and help prevent antibiotic resistance and endocrine disruption in humans.
- * **Additional human health benefits** - less obesity, diabetes and heart disease - from an improved diet with fewer highly-processed corn and soybean products, and less meat from grain-fed animals.
- * **Improved wildlife habitat** from maintaining permanent cover.
- * **Perennial vegetation would act as a carbon sink** to help slow climate change.
- * **Revitalization of our rural communities** through the need for more farmers, local processing and manufacturing of bulk crops; and because we would replace industrial

ag's inputs and structures with management and labor (farmers).

***A rebuilding of our transportation infrastructure**, roads and rail, to facilitate local manufacturing and processing of crops.

These advantages, and problems solved, also would be important benefits of changing the farm bill to give farmers incentives to re-perennializing our agriculture.

Thank you very much for allowing us time to make this formal request. We would be pleased to return to continue this dialogue, to present the PowerPoint, or discuss possible courses of action that you may want to consider.

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