



Brought to you by:  
**1000 Friends of Iowa**  
*Citizens for Responsible Land Use*

---

## TOPSOIL RESTORATION AND PROTECTION TOOLKIT

### What is it?

- Scraping off topsoil is part of the site preparation process for new construction projects. It is necessary in order to level the site. However, it has become common practice for builders and developers to use the soil elsewhere in the development or to completely remove the soil from the site altogether, leaving new construction properties without topsoil.
- In addition, any soil that is not removed is at risk of compaction due to the use of heavy machinery.
- A topsoil restoration and protection ordinance sets up requirements for builders to protect and restore topsoil evenly across the specific property it came from, usually with a minimum depth requirement.

### Why is it important to protect topsoil?

- A topsoil protection ordinance is a critical component of a stormwater and flood management plan, in addition to protecting homeowners. Topsoil acts as a sponge and absorbs rainfall. Clay is nearly impervious to water, so without topsoil, rainwater runs off, usually carrying pollutants and contributing to pollution and flooding problems.
- Topsoil has direct impact on stormwater runoff, and it will also reduce water pollution and add value to the property.

- Topsoil soaks up rainwater and snowmelt filtering it and reducing the amount that runs off. Without soil, stormwater can quickly overwhelm storm sewers, causing flooding and runoff into rivers and streams causing water pollution.
- Topsoil is very important to urban landscapes -- growing plants need healthy soil. New homeowners with no topsoil left in place are often faced with very expensive soil remediation to even begin to establish healthy lawns, trees, and gardens. New homebuyers expect that when they buy a lot or a new home that the soil is part of that lot or home.
- When the topsoil is stripped away, homeowners often turn to fertilizers and chemical amendments to encourage plant growth. With no topsoil to soak into, these chemicals find their way into our waterways after rain events, which pollute our rivers, lakes, and streams.
- Without changing our pattern of development, which channels water above ground directly into rivers and lakes instead of allowing it to infiltrate into the ground, we will continue to see increased flooding, pollution, and degradation of our water. **To read about the importance of soil for natural water filtration, visit <http://bit.ly/1YJe9hB>**

#### **Draft Ordinances:**

- **Municipal or County Construction and Design Code** – Some communities have been adding the topsoil restoration and protection ordinance to their existing construction and design code, specifically in the post construction section of the code. Numerous cities, counties and states across the country have been adopting these ordinances as part of the post construction requirements, including communities in Minnesota, Wisconsin, Washington, Oregon and others. **For a sample ordinance modeled after King County, WA, visit <http://bit.ly/1Sn6SA0>**  
**For their implementation guide, go to <http://bit.ly/1YJezEI>**
- **MS4/Post Construction Stormwater Control Code** – some communities have an MS4 permit and have been adding the topsoil

restoration and protection ordinance to the stormwater management plan and specifically to the construction stormwater control requirements. We really like the City of Clive's original proposed ordinance, which has an 8-inch topsoil requirement.

**To view the original proposed Clive ordinance, visit <http://bit.ly/1XLd7kM>**

### **What's the process?**

- **Pull together your team.** Talk to your friends, family, and neighbors to find out who else might care about this. Get them together and make your plan.
- **Decide which version of the ordinance makes the most sense for your community.** There are several versions of the topsoil restoration and protection ordinance. Some communities are required to have an MS4 permit and will include this ordinance as part of that, others include it as part of the construction and design requirements. The various versions of the ordinance range from requiring a minimum amount of topsoil to be replaced, to including additional requirements, such as soil tests before projects begin or tilling the clay before soil is replaced to help improve the soil.
- **Build allies in local government.** Identify who in city/county government are the right people to talk to. The City Council or the County Supervisors will ultimately have to pass the ordinance, but there may be other offices or committees that can be helpful, such as city development or sustainability administrators. Set up one- on-one meetings with these people to get them on your side. Start with the person that you think is the most open to this or that you have the best relationship with.
- **Learn the process.** Call the city or county clerk to learn the specific process for introducing and passing an ordinance in your city or county.
- **Build support.** Talk to as many people as possible about the ordinance, pass around a petition and gather signatures. Talk to your neighbors and talk to folks that might have been impacted by flooding or who live

in a new home or development that have had struggles with their topsoil.

- **Attend city council meetings and speak out.** Take the draft rule to your city council meeting and ask the council to consider adopting the same ordinance. Make sure you have others with you willing to speak out as well. If you can identify a champion on the council or in one of the relevant county departments such as the development department, the sustainability office, or the stormwater control department, that is even better.
- **Get some press.** Make sure you and your team are talking to the press, writing letters to the editor and otherwise drawing positive attention to the ordinance and your efforts. This will help get the word out and even more folks supporting you.

**Municipalities and counties that currently have a topsoil ordinance or are in the process of adopting one (that we know of):**

- Davenport, IA
- North Liberty, IA
- Coralville, IA
- Cedar Rapids, IA
- Marion, IA
- Clive, IA (in process)
- Elkhart, IA (in process)

**How can you help?**

Encourage your community to pass an ordinance as well! We can help!

- Use the 1000 Friends of Iowa toolkit and draft ordinances.
- Set up a time to talk with us on organizing strategies to get it passed.

Created by 1000 Friends of Iowa

3850 Merle Hay RD

Des Moines, Iowa 50310

(515)288-5364

[www.1000friendsofiowa.org](http://www.1000friendsofiowa.org)

[kfoi@1000friendsofiowa.org](mailto:kfoi@1000friendsofiowa.org)