



## think outside the box

The best septic system designs consider specific site conditions such as soil type and depth, and minimize disturbance to forest cover. Native trees and plants are important for managing rainfall on your property. Ask your septic designer about high performance systems that better protect the natural landscape.

- Reduce land clearing for your drainfield by routing effluent pipes around existing trees and other plants.
- Preserve and restore the quality of disturbed soil by following King County's Clearing and Grading regulations *KCC 16.82*.  
<https://kingcounty.gov/depts/dnrp/solid-waste/compost-calculator.aspx>
- Drip systems can be used to irrigate ornamental landscaping.
- Reuse greywater from sinks, showers, and washers to flush toilets. Ask Public Health about approved systems.
- Minimize repair and replacement costs by following the recommended maintenance schedule for your septic system.

Public Health  
Seattle & King County



King County

Department of Natural Resources and Parks  
Solid Waste Division

Alternative Formats On Request  
206-296-4466 | TTY Relay: 711  
1-800-325-6165 ext. 6-4466



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January 2020

rural

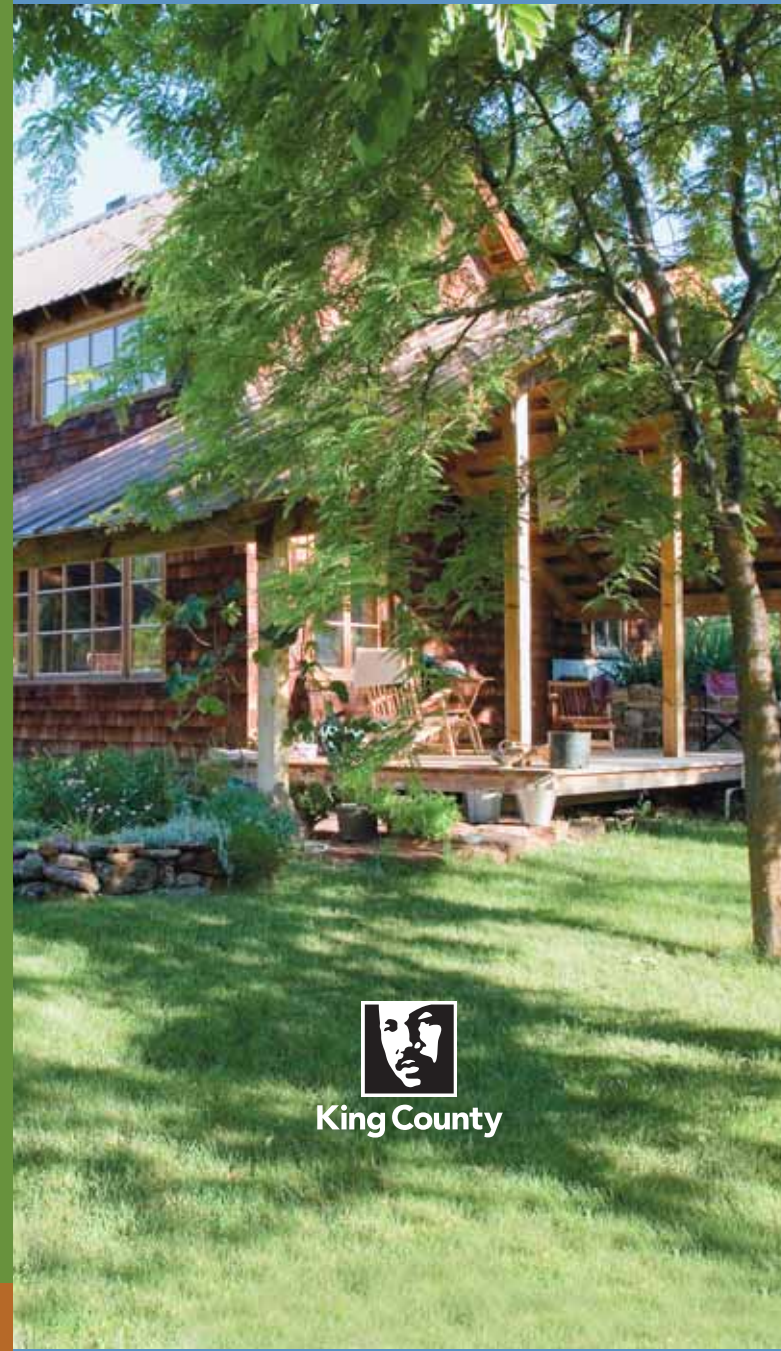
{ getting it right the first time  
– a homeowner's guide for  
remodels and expansions }

# green septic systems



## septic systems are green

Taking care of our environment is everyone's responsibility. A properly designed and maintained septic system is an effective way to treat wastewater, prevent pollution, and protect your investment. Do the right thing for your septic system by making smart, environmentally-friendly choices.



King County



# first things first

## do I need public health approval?

Properties served by a septic system must get Public Health - Seattle & King County (Public Health) approval before making any significant changes that could affect the septic system.

- Public Health approval may be needed when adding additional square footage, detached structures, decks, or altering existing structures.
- If an approval is needed, the health inspector will make a site visit to confirm that the application site plan is congruent to the property, check for any problematic setbacks, and whether the proposed addition will require you to upgrade your septic system.
- Applications for approval may be submitted before or at the same time as the Building Department review.

## will I need a critical area review?

A Critical Areas Designation (CAD) is required if your parcel is in unincorporated King County, and will require a new drainfield or reserve area. This situation is common when building on undeveloped land, or if you propose a substantial remodel or replacement on a parcel with an older drainfield.

- A CAD review must be completed by Department of Local Services, Permitting Division, prior to submitting an application to Public Health.
- The product of the CAD review is a letter describing critical areas, if any, and their associated buffers. The letter is valid for five years.
- If your project does not require a new drainfield, a CAD is not mandatory, but you will still be required to comply with the Critical Areas Code (KCC 21A.24). This review will occur during the building permit process.
- If your property is not within unincorporated King County contact, your local Building Department jurisdiction to find out more about their CAD requirements.

## choose green materials

Make material choices that benefit both you and the environment— like selecting durable products that minimize waste and cut down on costs associated with maintenance or replacement.

- Look for products that come with a 30- or 50-year warranty for materials such as siding, roofing, and decking.
- Find salvaged, reused, or remilled materials for fixtures, doors, flooring and hardware to create a unique look.
- Use locally-sourced materials to reduce transportation costs and support local businesses.
- Choose materials that are rapidly renewable, such as bamboo, cork and strawboard, in place of lumber products from old-growth forests.
- Reuse or recycle construction and demolition waste to save money while keeping valuable materials out of landfills.
- Buy wood products with the Forest Stewardship Council (FSC) label, a guarantee that the materials are sourced from sustainably-managed forests.

# learn more

## King County

**Public Health – Seattle & King County Wastewater Program – 206-477-8050**  
[www.kingcounty.gov/oss/care](http://www.kingcounty.gov/oss/care)

Download applications, find septic system professionals, and learn more about septic system care.

**Green Tools – 206-477-4466**  
[www.greentools.us](http://www.greentools.us)

Free technical assistance to help residents and builders apply green building practices – from small remodels to community developments.

**Rural Stewardship Program – 206-296-8362**  
[www.kingcounty.gov/environment/stewardship/critical-areas/stewardship-planning/rural-stewardship-plan/rural-stewardship-facts.aspx](http://www.kingcounty.gov/environment/stewardship/critical-areas/stewardship-planning/rural-stewardship-plan/rural-stewardship-facts.aspx)

Helps landowners develop site plans that support environmental stewardship and protect critical areas while gaining regulatory flexibility and tax incentives.

**Department of Local Services, Permitting Division**  
206-296-6600

<https://www.kingcounty.gov/depts/local-services/permits.aspx>  
Issues building and land use permits for properties located in unincorporated King County. Drop in assistance weekday mornings at the permit center.

### Other Permitting Resources:

- Permitting Information and Application Packets - <https://kingcounty.gov/depts/local-services/permits/infosheets-forms/permit-application-forms-packet.aspx>
- Application and Information for Critical Areas Determination (CAD) permits - <https://kingcounty.gov/depts/local-services/permits/infosheets-forms/permit-application-forms-title.aspx#C>  
Also available online through MyBuildingPermit.com - <https://mybuildingpermit.com/>

**Washington State Department of Labor and Industries**  
1-800-547-8367  
<https://secure.lni.wa.gov/verify/>

Check if a Contractor, Plumber or Electrician is registered and has any summons or complaints. Homeowner's Guide to hiring a contractor: <https://lni.wa.gov/licensing-permits/contractors/hiring-a-contractor/>



*Many local utilities offer free conservation assist and rebates on energy or water saving products. For more information, visit:*

- *Puget Sound Energy – [www.pse.com](http://www.pse.com)*
- *Seattle City Light – [www.seattle.gov/light/conserve](http://www.seattle.gov/light/conserve)*
- *Saving Water Partnership – [www.savingwater.org](http://www.savingwater.org)*



Need help with creating a native plant landscape? King County's online Native Plant Resource provides easy-to-use plant lists and sample landscape plans at:

<https://green2.kingcounty.gov/gonative/index.aspx>



**Green Tools**

Powered by King County

Free resources for your building project.

[www.greentools.us](http://www.greentools.us)

# getting it right the first time

## why was my application turned down?

Applications are most commonly turned down because the application is incomplete or instructions on the application form and checklist were not followed properly. Other common reasons for getting turned down include:

- Not including a floor plan when applicable – If you are changing the current floor plan, you should supply a copy of the existing and proposed floor plan, including any plans for detached structures.
- The condition of the septic system is not satisfactory. The septic system must be in good working order. Large scale repairs may require a complete inspection report by a licensed On-site System Maintainer.
- Inadequate reserve area – The designated reserve drainfield area is compromised or damaged, not allowing for 100% reserve area. The lot may be too small to fit both a 100% reserve and an expanded house footprint.
- The existing septic system does not meet current code requirements such as setbacks or system size.

## when would I need a new septic system?

Generally speaking, the chances that you will be required to upgrade or replace your septic system increase the larger the project and the older the septic system. Other specific examples include:

- Adding an accessory dwelling – In most cases, an upgrade or new system will be required.
- Completely replacing the home – In such circumstances as replacing a house that has burned down, replacing a mobile home with a new mobile home, or replacing a house with a completely new permanent structure would require an upgrade or new septic system in most cases.
- Medical hardship – Adding a temporary accessory dwelling due to medical hardship will require an upgrade or replacement in some cases.

## financial assistance

Craft3 is proud to offer Clean Water Loans to repair or replace failing on-site sewage systems.  
<https://www.craft3.org/Borrow/clean-water-loans>

## ask the expert

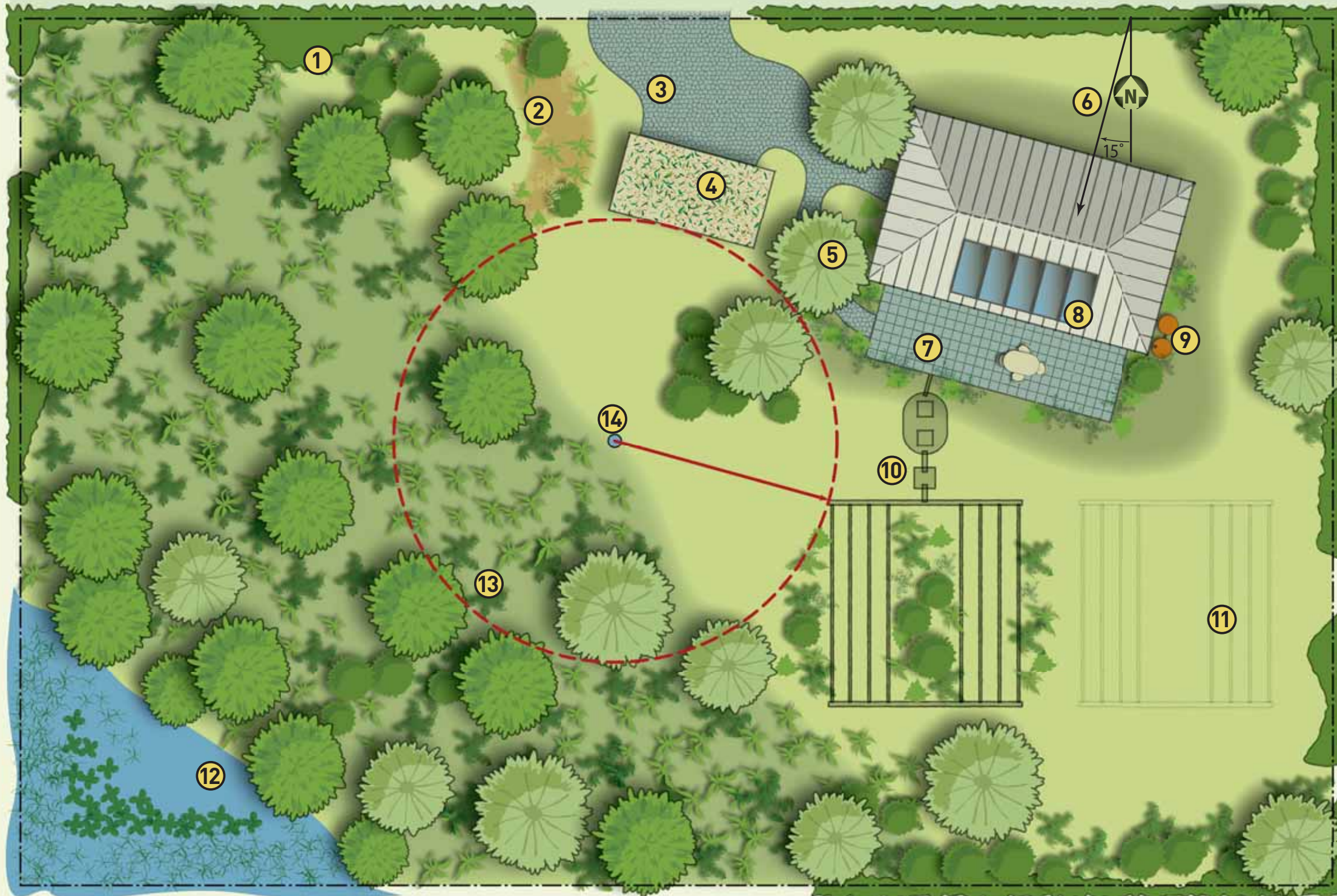
It's a good idea to consult both a contractor and a licensed Septic System Designer for moderate to large scale projects. You may think that cutting out the middle man will save you time and money, but in doing so you may end up with a disapproved application.

- A Septic System Designer can help determine whether your project will require you to upgrade or replace your septic system.
- A general contractor can help make sure that your project will meet structural requirements.
- Choose the right professional – make sure you choose someone that is licensed. Go to the web sites listed in the "Learn More" section to look up whether a professional is licensed or has any summons or complaints. Ask people you trust for referrals.
- Communication is key – get clear concise answers from the professional you choose including: total cost of project, time-frame of project, and whether your septic system will need to be upgraded or replaced.



# site drawing that incorporates environmentally friendly choices\*

- ① Living fence for privacy screen
- ② Rain garden to infiltrate runoff
- ③ Pervious pavement
- ④ Proposed addition/studio/garage with green roof
- ⑤ Deciduous trees on the west side for summer shade
- ⑥ House oriented for solar exposure
- ⑦ Pervious patio
- ⑧ Solar panels
- ⑨ Rainwater collection for irrigation
- ⑩ Septic tank and drainfield
- ⑪ Reserved drainfield area
- ⑫ Wetland
- ⑬ Wetland buffer and wildlife corridor with native vegetation
- ⑭ 100 foot well radius



\*Note this drawing may not meet all Public Health submission requirements. Please refer to the Public Health application and checklist for a complete description of what should be included on your site drawing.