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Guidance

Flood risk assessment: the sequential test for applicants

Find out if you need to carry out the sequential test as part of your flood risk assessment and how to complete one.

From:

[Environment Agency \(/government/organisations/environment-agency\)](/government/organisations/environment-agency) and
[Department for Environment, Food & Rural Affairs \(/government/organisations/department-for-environment-food-rural-affairs\)](/government/organisations/department-for-environment-food-rural-affairs)

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You may need to carry out a [sequential test](http://planningguidance.planningportal.gov.uk/blog/guidance/flood-risk-and-coastal-change/the-aim-of-the-sequential-test/) (<http://planningguidance.planningportal.gov.uk/blog/guidance/flood-risk-and-coastal-change/the-aim-of-the-sequential-test/>) as part of your [flood risk assessment](https://www.gov.uk/flood-risk-assessment-for-planning-applications) (<https://www.gov.uk/flood-risk-assessment-for-planning-applications>).

The sequential test compares the site you're proposing to develop with other available sites to find out which has the lowest flood risk.

If you need to carry out a sequential test you can present it in any format as long as you meet the requirements in this guide.

Developments that need a sequential test

You need to do a sequential test if both of the following apply:

- your development is in [flood zone 2 or 3](http://planningguidance.planningportal.gov.uk/blog/guidance/flood-risk-and-coastal-change/flood-zone-and-flood-risk-tables/table-1-flood-zones/) (<http://planningguidance.planningportal.gov.uk/blog/guidance/flood-risk-and-coastal-change/flood-zone-and-flood-risk-tables/table-1-flood-zones/>) - [find out what flood zone you're in](https://flood-map-for-planning.service.gov.uk/) (<https://flood-map-for-planning.service.gov.uk/>)
- a sequential test hasn't already been done for a development of the type you plan to carry out on your proposed site - check with your local planning authority

Developments that don't need a sequential test

You don't need to do a sequential test if one has already been carried out for a development of the type you're planning (eg a residential development) for your site.

In this case, you need to ask your local planning authority for the site allocation reference in their [local plan](http://www.planningportal.gov.uk/planning/planningsystem/localplans) (<http://www.planningportal.gov.uk/planning/planningsystem/localplans>) and include it in your planning application. If the local plan hasn't been adopted, check the draft local plan.

You also don't need to do a sequential test if either of the following apply:

- your development is a [minor development](http://planningguidance.planningportal.gov.uk/blog/guidance/flood-risk-and-coastal-change/what-is-meant-by-minor-development-in-relation-to-flood-risk/) (<http://planningguidance.planningportal.gov.uk/blog/guidance/flood-risk-and-coastal-change/what-is-meant-by-minor-development-in-relation-to-flood-risk/>)
- your development involves a change of use (eg from commercial to residential) unless your development is a caravan, camping chalet, mobile home or park home site

You also don't need to do a sequential test for a development [in flood zone 1](http://planningguidance.planningportal.gov.uk/blog/guidance/flood-risk-and-coastal-change/flood-zone-and-flood-risk-tables/table-1-flood-zones/) (<http://planningguidance.planningportal.gov.uk/blog/guidance/flood-risk-and-coastal-change/flood-zone-and-flood-risk-tables/table-1-flood-zones/>) unless there are flooding issues in the area of your development. You can check this in your local planning authority's [strategic flood risk assessment](https://www.gov.uk/guidance/local-planning-authorities-strategic-flood-risk-assessment) (<https://www.gov.uk/guidance/local-planning-authorities-strategic-flood-risk-assessment>).

Information about your proposed site

If you need to do a sequential test, you need to include both:

- the name and location of the site you're proposing for development
- an explanation of why you chose that specific site

Information about alternative sites

Where to look for alternative sites

Contact your local planning authority to discuss what the search area should be for alternative sites for your development.

Potential alternative sites

Within the area you've agreed with your local planning authority, look for sites that could be suitable for your development.

First, check your adopted or draft local plan for sites that have already been allocated for development and could be suitable for the development you're proposing.

Also look at sites that haven't been allocated in the local plan, but that have been granted planning permission for a development that's the same or similar to the development you're proposing. Your local planning authority will have details of sites with planning permission.

Finally, check with your local planning authority whether there are any 'windfall sites' in your search area. Windfall sites are sites that aren't allocated in the local plan and don't have planning permission, but that could be available for development.

You can look for windfall sites yourself and you should also check if your local planning authority has information about possible windfall sites (eg urban capacity studies).

Estimate approximate capacity

You need to check the approximate capacity of each potential alternative site, eg how many houses can be built per hectare on the site.

If your local planning authority has a density policy (a rule on the density of new developments), you should take this into account when estimating capacity.

If your local planning authority doesn't have a density policy, you should consider the average density at which houses have been built on the site in the past.

Check with your local planning authority if you're unsure if it has a density policy.

Information to provide about alternative sites

For each of the potential alternative sites, you need to state:

- its name and address
- whether it has been allocated in the local plan (ie identified for a specific use like housing)
- any issues that would prevent development on the site (eg roads that are too small) and whether these issues could be overcome
- your estimate of its approximate capacity

You also need to include the following information:

- the status of the local plan (eg whether it's been adopted or is in draft)
- supporting documentation about your alternative sites, eg the local plan background and evidence base documents or housing and economic land availability assessments

You can find this information by speaking to your local planning authority or by checking the planning section of their website.

How to compare flood risk

You need to compare the risk of flooding at the site you're proposing to use with the risk of flooding at the alternative sites you've identified.

You can use the following resources to compare flood risk:

- the [Environment Agency's Flood Map for Planning \(https://flood-map-for-planning.service.gov.uk/\)](https://flood-map-for-planning.service.gov.uk/)
- the [Environment Agency's Long Term Flood Risk Information \(https://www.gov.uk/check-long-term-flood-risk\)](https://www.gov.uk/check-long-term-flood-risk)
- a [strategic flood risk assessment \(https://www.gov.uk/guidance/local-planning-authorities-strategic-flood-risk-assessment\)](https://www.gov.uk/guidance/local-planning-authorities-strategic-flood-risk-assessment) if one's been adopted as part of the local plan - contact your local authority to check this and to get a copy
- existing flood risk assessments on the sites - contact your local planning authority to get these
- any other source of flooding information (eg surface water management plans from your [lead local flood authority \(https://www.gov.uk/find-your-local-council\)](https://www.gov.uk/find-your-local-council))

If the sites you're comparing are in the same flood zone and you compare them using the Environment Agency flood map, you'll have to use at least one other method of comparison as well as the flood map to get sufficient detail.

Your conclusion

You need to conclude whether any of the alternative sites you have identified have a lower risk of flooding than your proposed site.

How to submit your test

You need to submit your sequential test and your flood risk assessment with your planning application to your local planning authority.

Your local planning authority will review your sequential test and tell you if it's been accepted. If it's accepted, you'll need to wait for the result of your [planning application](http://www.planningportal.gov.uk/planning/applications/) (<http://www.planningportal.gov.uk/planning/applications/>).

You [can appeal](http://www.planningportal.gov.uk/planning/appeals/appeals/) (<http://www.planningportal.gov.uk/planning/appeals/appeals/>) if your sequential test isn't accepted and your planning application is refused.

The exception test

If your sequential test shows that it isn't possible to use an alternative site, you'll need to do another test called the [exception test](http://planningguidance.planningportal.gov.uk/blog/guidance/flood-risk-and-coastal-change/the-exception-test/) (<http://planningguidance.planningportal.gov.uk/blog/guidance/flood-risk-and-coastal-change/the-exception-test/>) if your development is:

- highly vulnerable and in flood zone 2
- essential infrastructure in flood zone 3a or 3b
- more vulnerable in flood zone 3a

Find out [what flood zone you're in](https://flood-map-for-planning.service.gov.uk/) (<https://flood-map-for-planning.service.gov.uk/>) and [how vulnerable your development is](http://planningguidance.planningportal.gov.uk/blog/guidance/flood-risk-and-coastal-change/flood-zone-and-flood-risk-tables/table-2-flood-risk-vulnerability-classification/) (<http://planningguidance.planningportal.gov.uk/blog/guidance/flood-risk-and-coastal-change/flood-zone-and-flood-risk-tables/table-2-flood-risk-vulnerability-classification/>) to flooding, including whether your development is essential infrastructure.

How to do the exception test

The exception test shows how you'll manage flood risk on your proposed site.

In your exception test, you need to show that the [sustainability benefits](http://planningguidance.planningportal.gov.uk/blog/guidance/flood-risk-and-coastal-change/the-exception-test/how-can-wider-sustainability-benefits-to-the-community-that-outweigh-flood-risk-be-demonstrated/) (<http://planningguidance.planningportal.gov.uk/blog/guidance/flood-risk-and-coastal-change/the-exception-test/how-can-wider-sustainability-benefits-to-the-community-that-outweigh-flood-risk-be-demonstrated/>) of the development to the community outweigh the flood risk.

You also need to show that the development will be safe for its lifetime taking into account the vulnerability of its users and that it won't increase flood risk elsewhere. You need to refer to your flood risk assessment and your local authority's strategic flood risk assessment in your response.

You can present the exception test in any format. You need to submit it to your local planning authority with your sequential test, flood risk assessment and planning application.

Talk to your local planning authority if you need help completing your exception test.

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