



Earlier this year, we engaged with the public on our plans for the future of Cannop Ponds – two reservoirs within the Forest of Dean created in the 1820s through the construction of two dams across Cannop Brook.

The reservoirs originally provided water for industrial uses and have since become a valued part of the Forest.

Both dams have had a long history of repairs to stop leaks and fill holes to prevent failure.

The dams do not meet modern requirements and now need substantial engineering work if they are to remain safe for generations to come.

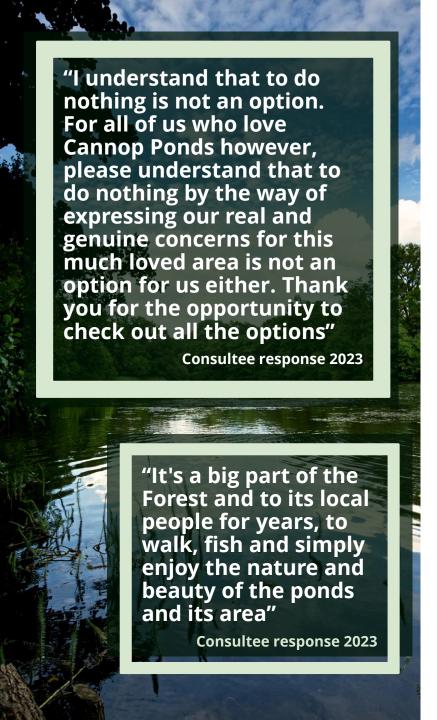
We publicly shared four proposals illustrating the range of approaches being considered, from significantly upgrading the dams and spillways, to renaturalising Cannop Brook.

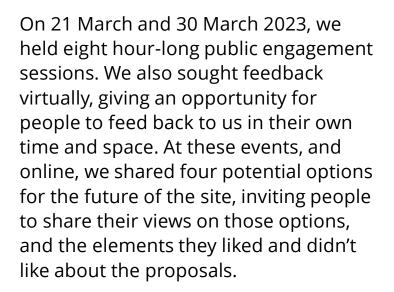
No decision has yet been made.

"It was a great opportunity to be involved with the decision making at this stage.

In most cases local stakeholders and residents would never get the opportunity to share their thoughts. The decision would usually just be made without them"

**Consultee response 2023** 





We received more than 700 feedback responses, both online and in-person. Thank you to everyone who took the time to share their thoughts as part of this public engagement. This information has now been analysed and is set out in this document. Your views are very important to us and add to those expressed by attendees at workshop sessions that have also taken place.



#### **Outcomes**

The spring public engagement generated 333 paper responses submitted at the inperson events and 403 online responses. Whilst there was an over-riding sense of passion for Cannop Ponds and a demand to keep the Ponds as they are, there was also an understanding of the need to make the dams safe and to respond to our changing climate. Many responses recognised the benefits that our proposals could bring for people, with improvements to make the area more accessible and inclusive. Responses recognised and expressed concern for the impacts of change on wildlife and the landscape, with potential benefits and improvements for wildlife also identified. Much of the value of the responses lay in the 'free-text' comments and we have reproduced a small number of those comments in this document.

## Option 1 – Spillway and Dam Upgrade

- This option upgrades the dams and spillways and will allow the Ponds to remain as they are now.
- The new spillways will be larger concrete structures that are designed to safely carry more water in extreme storm events.
- The tops and sides of the dams will be raised and strengthened.
- Works will be undertaken to improve the watertightness of dams to reduce flood risk.
- Downstream flood risk from storms will be similar to now.

#### Option 2 – Storm Water Storage

- This option provides more water storage in storm events.
- The water level in Lower Cannop Pond would be dropped by 1 to 2 metres, retaining it as a smaller reservoir.
- A new larger spillway would be required. The Upper Cannop Pond spillway would be removed.
- This will reconnect the watercourse and allow creation of a series of smaller ponds.
- The risk of downstream flooding and dam failure is reduced.

## Option 3 – Cascade of Ponds

- This option removes both spillways and creates a series of ponds through the valley.
- The cascade of ponds would be achieved through the construction of embankments, or 'leaky' woody structures across the valley to hold water.
- The risk of future dam failure would be removed and the creation of ponds through the valley would re-connect the floodplain.

## Option 4 – Re-naturalising Cannop Brook

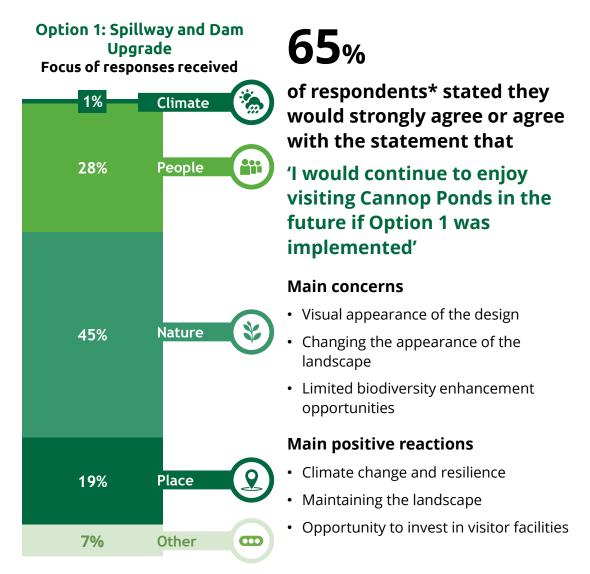
- This option removes both spillways and reinstates Cannop Brook.
- The risk of future dam failure would be removed.
- Natural processes would shape the valley creating a mix of grassland and woodland habitats.
- This option would result in the loss of both Ponds.

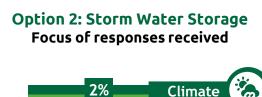
### The Options

We shared four options demonstrating the range of solutions being considered, all of which were designed to ensure the safety of the dams and the downstream communities and showed the potential range of features. The 'preferred solution' may be one of the options or a combination of the four.

We received constructive and considered feedback from our engagement, which will now form part of our assessment of the options. In the following pages we show insights from the consultation based around four major themes: climate, people, nature and place.







33%

47%

12%

6%

People

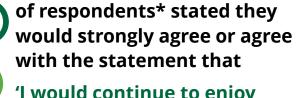
Nature

Place

Other

**@** 





'I would continue to enjoy visiting Cannop Ponds in the future if Option 2 was implemented'

#### **Main concerns**

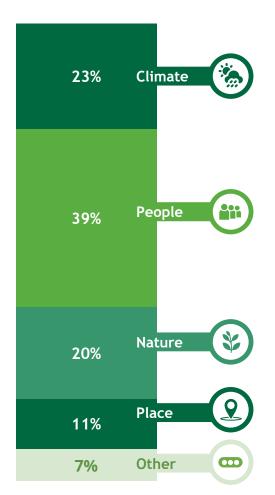
- Disturbances to wildlife and loss of habitat
- Changing the appearance of the landscape
- Visual appearance of the design

#### Main positive reactions

- Climate change and resilience
- Biodiversity enhancement opportunities



Option 3: Cascade of Ponds Focus of responses received



8%

of respondents\* stated they would strongly agree or agree with the statement that

'I would continue to enjoy visiting Cannop Ponds in the future if Option 3 was implemented

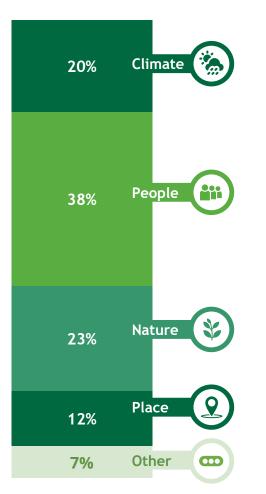
#### Main concerns

- Disturbances to wildlife and loss of habitat
- Level of commitment to long-term maintenance

#### Main positive reactions

- Biodiversity enhancement opportunities
- Positive impact on habitat of wetland birds and beavers
- Accessibility and inclusion opportunities

Option 4: Re-naturalising Cannop Brook Focus of responses received



**5**%

of responses\* stated they would strongly agree or agree with the statement that

'I would continue to enjoy visiting Cannop Ponds in the future if Option 4 was implemented'

#### Main concerns

- Disturbances to wildlife and loss of habitat
- Loss of cultural/industrial heritage
- Visual appearance of the design of the concrete spillways

#### Main positive reactions

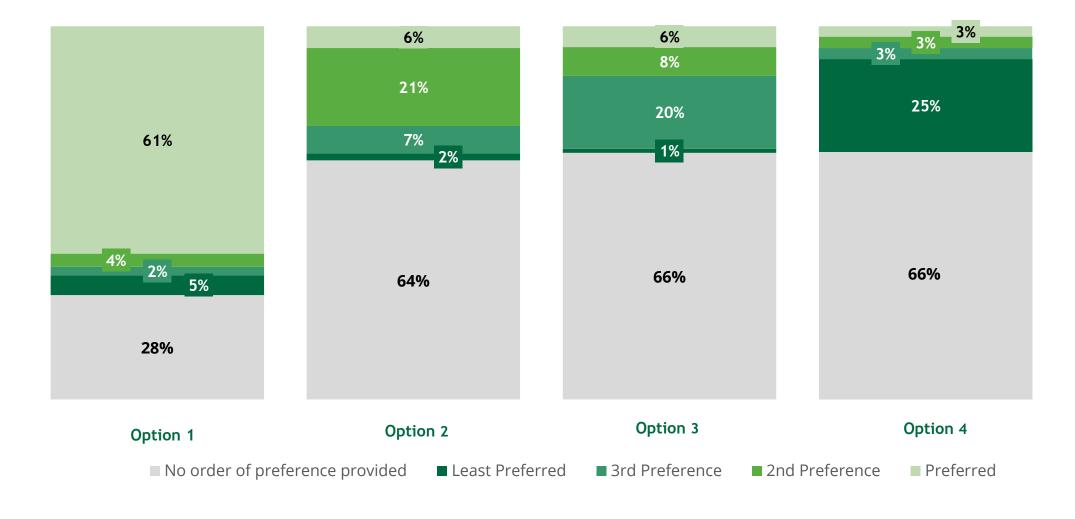
• Biodiversity enhancement opportunities

#### **Preferred options**



We asked the public which of the four options people preferred.

The below results show the order of preference provided by all respondents for the 4 options.



It is important to us that you have a voice in how the Cannop Ponds project develops and that we get this scheme right.

Over the next few months, we will have the results of our flood modelling work, ground investigations and biodiversity surveys, which we will publicly share. We will then spend time considering the findings from all the surveys as part of our ongoing exploration into the best option for Cannop Ponds.

We will organise a further round of public consultation in 2024.

"The benefit for wildlife, particularly eels and other native fish species will be undoubted. Wetland birds should also prosper, and good opportunity for otter and potentially beavers in the future." **Consultee response 2023** "I'm very aware of the fast-changing climate change, any work done should have climate change incorporated as priority. The purpose of whatever option is decided is for PEOPLE and should remove the threat of a flood disaster further down towards Lydney"

**Consultee response 2023** 

cause untold devastation and loss

Any other option will

existing and thriving

of life."

"The ponds

represent an

ecosystem that supports many

species of life.

maintaining this ecosystem as it is.

Lsupport

**Consultee response 2023** 

## **Frequently Asked Questions**



We want to extend our thanks to everyone who took the time to engage with us about the future of Cannop Ponds.

#### Q Can accessibility be improved?

The potential for accessibility improvements will depend on the option chosen. Option 1, for example, offers the smallest opportunity to improve accessibility as its primary aim is to keep the site as near to its existing state as possible while ensuring the safety of the dam. Other options, such as options 3 and 4, give a wider scope for accessibility improvements.

## Q How can the heritage of the site be retained?

All options will unfortunately have an impact on the heritage, but we will minimise this as much as possible.

## Q Is there an opportunity to implement more greenery, including more tree planting into the design?

The aim of option 1 is to keep the site as near to its existing state as possible while ensuring the safety of the dam. The other options (2-4) open up more space and therefore provide greater potential to incorporate greenery, including tree planting and will therefore be considered for these options during assessment.

#### Q Would it be possible to use local stone?

We agree that the use of local stone could enhance the character of the site. There are elements that could be faced in local stone, but much of the hard engineering for the new spillways (where proposed) and strengthening works to the dams must be in concrete or reinforced concrete to achieve the necessary strength and longevity. Using local stone as a façade will impact our ability to access the concrete in the future but we will consider it as part of our options assessment.

# Q Will there be an opportunity to improve the heritage trail, through such things as art installations and interpretation boards?

Yes, we will seek to further develop any enhancements incorporated into the scheme such as the heritage trail in collaboration with both local interest groups and through further public consultation.

### Q Could beavers be introduced to the site?

This is not something we are considering at this time as part of the options assessment. This is because the site wouldn't lend itself to enclosed beaver population due to the fencing required. Existing regulation requires beaver habitats to be fenced to prevent migration. However, we are working on a wider strategy to support potential beaver populations in the future across Forestry England sites and will consider this as part of this options assessment if legislation changes.

### **Frequently Asked Questions**



## Q Could dog-free areas be provided?

At this time, we will not be considering dog-free areas as part of the options assessment. However, this could be explored in the future once a preferred solution has been identified. If so, this would be included this as part of the consultation planned for next year.

## Q Could duck houses be included as part of the chosen option?

All options continue to support the ducks, and we want to ensure we are supporting all nature currently found within the site. However, there may be other enhancement options which could support ducks and other wildlife better, like vegetative islands. A biodiversity strategy will be developed once a preferred strategy is chosen to create a bespoke solution for Cannop Ponds to enhance and support the site's biodiversity.

## Q Could more public amenities be created to generate income to fund maintenance?

Although there is a potential to increase visitor numbers and generate income, those facilities do require maintenance of their own. In addition, opposing feedback received from the public has requested the site should be allowed to remain quiet, natural and less developed. Therefore, we will not be considering public amenities as part of the options assessment, however, it could be explored further once a preferred solution has been identified in the future.

# Q How would the chosen option be maintained and avoid becoming overgrown?

All options would have areas which would need to be maintained. A management plan and the resources to support its delivery would be put in place for the chosen option as part of gaining planning permission.

## Q Will fishing be allowed in the future on the site?

Our intent is to allow licensing for fishing at the site. However, fishing and reservoir regulations are often in conflict, and we would need to make sure we adhere to all relevant legislation in the future.

## Q Would it be possible to include dipping ponds for children?

We will look for opportunities to deliver dipping platforms where safety regulations allow as part of the options assessment.

# Q Could the community help with any tree planting proposed?

Yes, we regularly run tree planting initiatives and love the community getting involved with our sites. We will look for opportunities in the future when a preferred option has been identified of where and when this could take place.

### **Frequently Asked Questions**



## Q Could you create a bypass sluice or diversion instead?

The idea of creating a by-pass channel so storm flows are channelled away from the Ponds is not one we are exploring at this time. The volume and flow of water into the reservoir in an extreme storm would be immense, a by-pass channel to take that flow would need to be of a considerable width, depth and length, and it is therefore considered to be impractical.

## Q Can something be done to support the eel population within the ponds?

All options will need to be eel regulation compliant, and an impact assessment on the eel population will be undertaken as part of developing the preferred option in the future. Currently, options 1 and 2 are potentially better for eels as these options maintain both reservoirs rather than the river and pond environments proposed in options 3 and 4. As part of the options assessment, ecology of the site will be considered, including eel populations.

# Q Can you lower the height of the concrete walls proposed?

Wall height of reservoirs is required for safety purposes; therefore, we are unable to lower them as we need to ensure the preferred option meets all required safety standards.

## Q Could areas without public access be created to support local wildlife?

This is something we that could deliver as part of options 2, 3 and 4 and we will consider this as part of the options assessment.

#### Q Is there an opportunity to deliver overflow storage to avoid flooding or more ponds for wildlife south of the site?

This is not possible due to the area being designated as a Site of Special Scientific Interest. This would also not address the identified safety issues within the reservoirs these options are designed to address.

# Q Can the options be designed to be less industrial in appearance?

We will look for opportunities to help the proposed options blend in with the surrounding landscape as part of the options assessment.

#### Q Is there an opportunity to generate electricity from the dams in the future?

The existing hydro-electric plant generates some of the electricity used by the Stoneworks. However, generation has not fulfilled its potential. In usual circumstances, to support the eel pass, the hydro plant is closed off when water levels are low to ensure a minimum flow continues down the spillway. At the moment, for engineering reasons, we have had to fully open it. It would be possible to design and build a more efficient and reliable plant under option 1 but doing so would complicate the design and compromise the integrity of the dam, so is not viable within the scope of this scheme. In option 2, the water level would be lower than present, again reducing the viability for hydro-electric generation.



## What is happening now?



We are now refining a preferred option based on your feedback and on the additional technical work which is currently ongoing.

As these technical works are completed, we will spend time considering their findings. In combination with your feedback, they will help us refine a preferred option for the site.

The preferred option may be one of the options or made up from a combination of the features in these options.

To support the process to refining a preferred option for the site, each of the four options will be assessed against the project objective, key principles, and project specific decision criteria.

#### **Decision Criteria**

All four options under consideration will deliver our over-riding objectives of achieving compliance with the Reservoirs Act. Each of the four options will then be assessed against our decision criteria, which are

- To match or improve upon the storm water storage capacity of the valley to reduce downstream flood risks;
- To safeguard protected species of wildlife and deliver a net gain for biodiversity;
- To maintain or improve access to the Ponds [or replacement habitats] for everyone;
- To safeguard the 'sense of place', that is to ensure that what ever we deliver fits into the Forest, culturally and visually;
- To deliver value for money this is not the same as delivering the cheapest scheme, but one that balances costs and benefits.

#### What happens next?

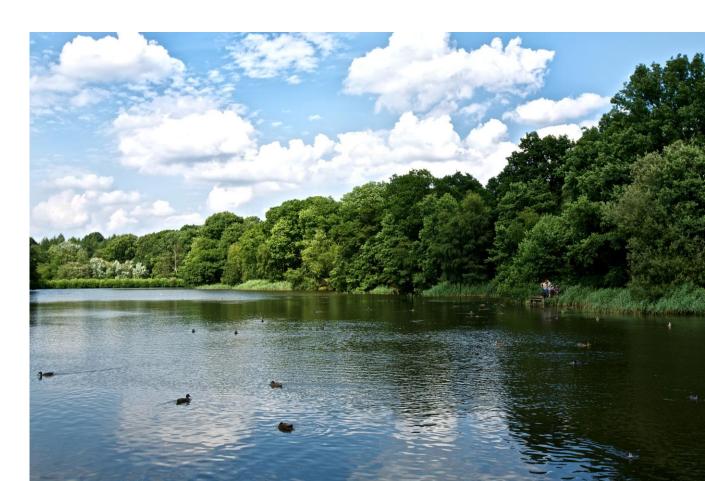


Our ambitions for Cannop Ponds are to improve flood mitigation, biodiversity net gain, public access and value for money. The final design for the site must achieve compliance with the Reservoirs Act.

#### **Our Next Steps**

By the end of 2023: We plan to share the results from our flood modelling, biodiversity surveys and ground investigation works.

In 2024: Using all the data and the views from this public engagement, we hope to be able to decide on a preferred option for the future of Cannop Ponds. We will hold a public consultation around this option before taking onboard your feedback as we progress towards a formal planning application.



#### Contact information



Thank you to everyone who spared the time to study our proposals and provide us with feedback, it has helped us as we work to find the right solution for this well-loved location.

#### Want to find out more?

The consultation information and documentation remains on our website for your reference and can be found at: https://www.forestryengland.uk/article/the-future-cannop-ponds

The future of Cannop Ponds | Forestry England.

**Contact us** 

Email | cannopponds@forestryengland.uk

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