



Castleconnell Flood Relief Scheme

Public Consultation Summary Report

June 2020



OPW Oifig na nOibreacha Poiblí
Office of Public Works



Tionscadal Éireann
Project Ireland
2040



Comhairle Cathrach
& Contae **Luimnigh**

Limerick City
& County Council

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Contract

This report relates to the Castleconnell Flood Relief Scheme commissioned by Limerick City and County Council, on behalf of the Office of Public Works. Declan White and Leanne Leonard of JBA Consulting carried out this work.

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Purpose

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1 Background to the Study

1.1 Purpose of the Public Consultation Event

The purpose of the public consultation event was to seek initial views from the public and other interested parties in relation to the key issues that the study should address, the options to manage the flood risk in Castleconnell, including the CFRAM scheme option, to highlight points of local importance that might constrain the design and/or viability of any potential flood alleviation measures and to collate information on any flood events that have occurred.

Effective communication with the locals in Castleconnell is vital given the frequency and magnitude of flooding in the village since 2009. Lack of engagement with residents could increase the risk of rejection of the scheme, or elements of the scheme, and lack of identification of key stakeholders could result in delays.

At this early stage of the project it is important that the project team has the opportunity to listen to the views of those who will be living and working near the scheme, and others who may also have an interest in the long term plans, as well as start to build a relationship with members of the local community.

1.2 Target Audience

Any and all interested parties, including political stakeholders. However, the focus of the event is the local residents and business holders. This includes those who have and have not flooded in the past.

2 Event Format

Given the Covid-19 pandemic and associated restrictions it was not possible to hold a public consultation day within the village as previously planned. As of 18th May, Ireland entered Phase 1 of the Roadmap for Reopening Society and Business. Such restrictions under Phase 1 include:

- Travel of greater than 5km from home is permitted only for essential services. Non-essential travel should be avoided;
- Indoor gatherings are not permitted;
- Outdoor gatherings are limited to a maximum of 4 people. Social distancing must be adhered to and the gathering must be within 5km of each person's home.

To comply with the Government restrictions and guidelines above, the format of the public consultation event was altered to ensure that all contact was via brochure and flyer drops and electronic means.

2.1 Means of Promotion and Communication

2.1.1 Brochure and Questionnaire drop

110nr brochures and questionnaires were distributed to select residents and businesses on Tuesday 2nd June 2020 and as outlined in Appendix A.

This brochure outlined the stages of the project along with an overview of the works completed to date, flood risk management options under consideration and possible solutions together with the CFRAMS scheme option as proposed.

2.1.2 Poster campaign

300 nr. flyers and posters were distributed to local businesses including:

- Shannon Stores,
- SuperValu,
- Green Cross Pharmacy,
- Sloan's Pharmacy,
- McDermott's Butchers,
- Castleconnell Post Office,
- Castleconnell/Ahane Credit Union.

The flyers directed residents to the brochure and questionnaire on the Limerick City and County Council website.

Those who wished to receive a hard copy of the brochure pack were directed to the JBA office.

2.1.3 Local Authority website

The brochure and questionnaire were uploaded to the Limerick City and County Council 'Castleconnell Flood Relief Scheme' web page and at the following link.

<https://www.limerick.ie/council/services/water-and-drainage/flooding-related-schemes-and-assistance/castleconnell-flood>

The questionnaire was made available in both PDF and word format.

2.1.4 Community groups and public organisations

A soft copy of the brochure and questionnaire were emailed to the following stakeholders:

- **[Name removed]** of the Castleconnell Fisheries Association who also circulated to the Ahane Castleconnell Montpellier (ACM) Development Activity Group;
- **[Name removed]** of the Love Castleconnell Group who circulated to Tidy Towns;
- **[Name removed]** of ESB;
- **[Name removed]** of Inland Fisheries Ireland;
- **[Name removed]** of National Parks & Wildlife Service;

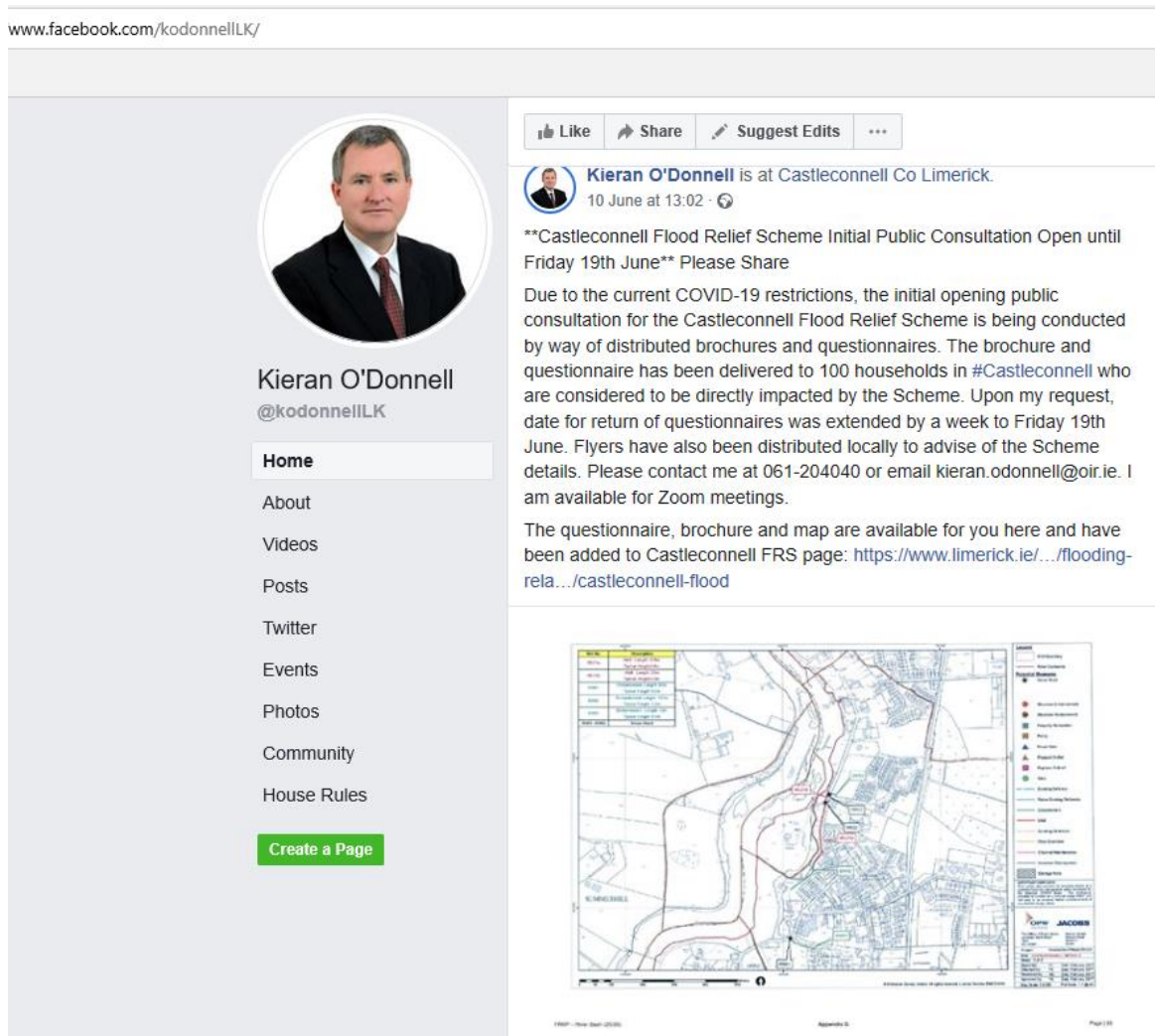
- Limerick & District Anglers Association;
- Mulcair Anglers;
- Ecofact;
- **[Name removed]**, resident of Scanlon Park, who circulated to other Scanlon Park residents via a Facebook group.

2.1.5 Kieran O'Donnell TD

Local Fine Gael councillor Kieran O'Donnell was consulted as to the content of the brochure and questionnaire prior to distribution. This resulted in extending the planned period for returns to Friday 19th June.

Mr. O'Donnell also shared a soft copy of the documents on his public Facebook page and as shown in **Error! Reference source not found.**

Figure 2-1: Extract from Kieran O'Donnell TD Facebook page



2.1.6 Other

A small number of questionnaires submitted have reported being made aware of the public consultation event via word of mouth.

3 Feedback Received

3.1 Questionnaire Analysis

There were 30 nr questionnaires returned as well as three email submissions. Out of these, eight were from residents or organisations outside of the leaflet drop area. The responses to the submissions are summarised hereunder.

3.1.1 Which area of Castleconnell do you have a particular interest in?

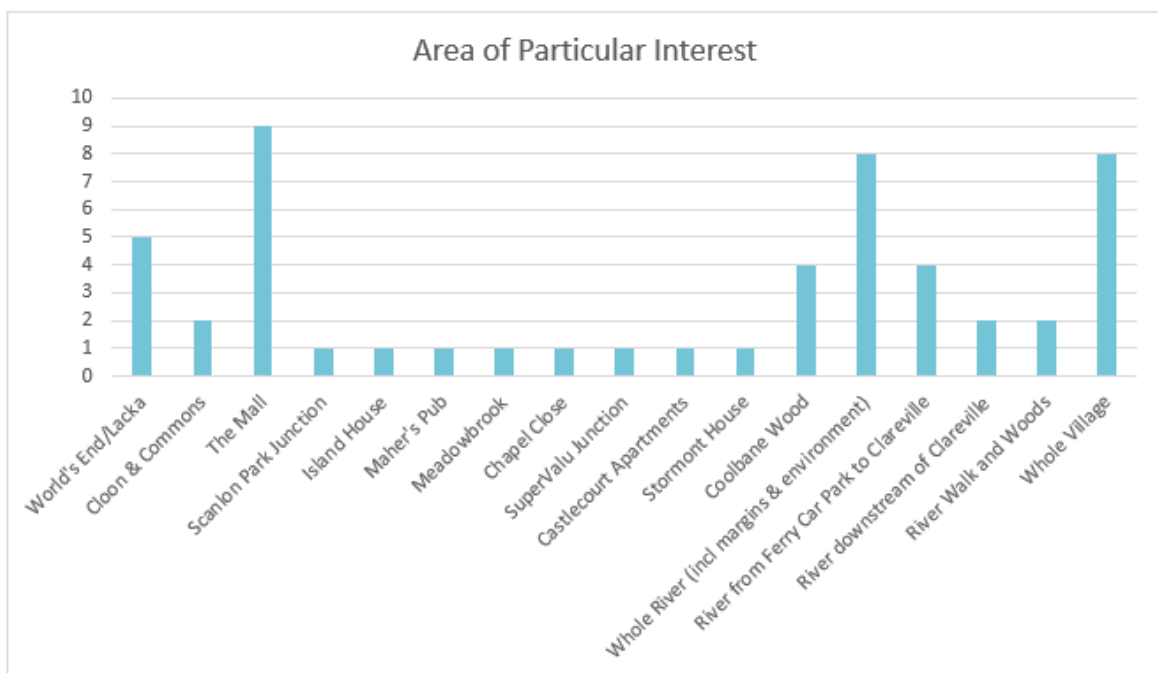
Twenty-six respondents were residents of Castleconnell, albeit some were from outside the area of the leaflet drop.

Seven respondents were from local kayaking/canoeing clubs that regularly use the River Shannon in Castleconnell. The area of interest for the majority of these clubs was generally the river itself from World’s End to Clareville Water Treatment Works.

The Castleconnell Fisheries Association response stated that the whole river including its margins and environment were of particular interest.

It should be noted that more than one answer was provided to this question in most returned questionnaires and therefore the total number of votes exceeds the number of respondents.

Figure 3-1: Respondent’s area of particular interest



3.1.2 Is there anything specific you would like us to take into account when designing the flood relief scheme?

There were a range of views relating to important elements of the design. Relevant feedback as extracted from the questionnaires is as listed hereunder and in no particular order.

- We’ve lived at [House name removed] for more than 50 years. There’s only been a problem once when due apparently to the ESB’s failure to allow for flooding, we were unable to get in and out of our gate due to the flood. The house was not affected but our neighbours across the road had a major problem due to sewage flooding.
- Chapel Close Resident:
 - Flooding of my neighbour’s home in the village.
- Coolbane Wood Resident:
 - Each year the wooded field immediately south of the public road and behind our houses is flooded.

- When flooding gets high it affects our sewerage system – but so far has not caused a break down.
 - The flooding has been dealt with in recent years by a pump on the road.
- Relocate the proposed embankment EM02 to run along the stream boundary to the west/north west of the lands owned by the Gubbins family to allow future development to the west of Meadowbrook. Please clarify why EM02 embankment is proposed to end where shown rather than running to River Shannon.
- The river height and flow when the works are complete.
 - Will the water level be stable or will it still be affected by water released from the Parteen Weir by the ESB?
 - Will any works carried out affect the strength of the flow at the area known as World's End?
 - Will the water course change direction in any specific way?
- Meadowbrook Resident:
 - Meadowbrook has suffered flooding from the drain near the bottom wall. Will these measures stop the water from coming out of this manhole.
 - Water level management in Lough Derg is a big concern. The consensus in the village is that competing interests are affecting decisions. Please investigate this thoroughly.
 - New proposals for building in Castlerock could push more water our way. Review our full submission to the OPW.
- Prior to designing the flood relief scheme, **[Name removed]** would ask that consideration is given for the current use of the river features for the sport of kayaking, when proposing changes in the channel and removing or installing/repositioning existing features under the heading of channel diversion and channel cleaning.

[Name removed] propose, if possible, is to assist and identify the position of existing key relevant features and where possible to assist and improve these features in conjunction with other kayaking clubs and Canoeing Ireland, with the overall aim of flood prevention and maximising this natural resource. This can be effectively achieved by strategically redistributing and structurally placing the extracted material from the river cleaning process and by utilising areas of backwater. The recent flooding has increased the ongoing bank erosion at the Ferry Bridge carpark and we suggest an alternative to standard bank rebuilding be implemented, and an appropriate water access point be considered in the design. When construction access & egress points have been established, we would ask that the Designer to consider utilising the construction access and egress space by developing community amenities at these positions and by providing additional parking. **[Name removed]** would ask that where possible any instream works be used as an opportunity to optimise the potential for all river users.
- Mall Road Resident:
 - Our home is the property most at risk of flooding in the first instance during a flooding event. The house flooded in 2009 and was saved only in 2015/2016 and more recently 2020 by county council pumps and sandbags. Flood events cause us extreme stress, anxiety and trauma. Our quality of life plummets for 2/3 months each year.
- I have read through your brochure on the above and found it very comprehensive and informative especially to any on new to the area.
 - I have lived in Castleconnell since 1940 and have seen how the river has been completely neglected since the Shannon Scheme was constructed and which now controls the flow of water to a major extent.
 - I have recorded the water levels during the big flood of 2009 and the low water level during dry season conditions and found the flow is reduced during a flood. The rock outcrop and the overgrowth at the start of the rapids at Hermitage is causing a difference in water levels before and after the constriction of 1.2m. There is also a constriction at the foot bridge and both of these plus the complete overgrown state of the river are causing a backup of water which increases flooding at Castleconnell village.

- Owing to the neglect of the Board of Works and controlled water flow by the ESB the river because of the reduced flow has become overgrown and silted up and this has added to the flood situation that we are now dealing with in Castleconnell, Clonlara, Corbally and Limerick City.
- Another major cause of flooding is the policy of the ESB to retain water to generate electricity at peak times and this demand is getting greater. They continue to retain water and keep Lough Derg at the highest level, allowed by law, so that when there is a period of prolonged heavy rain the water gets to a dangerous level and has to be released without complete control.
- The ESB power station at Ardnacrusha has caused untold environmental damage to the river, particularly in the Castleconnell area.
- If the trees and the overgrown sections were cleared the flow of the river would be restored and relieve the flooding situation.
- The streams and islands upstream of the village along from Island House to the Mall are of major importance as spawning and nursery streams for salmon, lamprey (marine) and trout, as well as a huge variety of birds. [Name removed] have been maintaining the streams for 13 years approx. which has resulted in a great improvement in seriously depleted salmon and lamprey stock. Spawning streams also present at Lackaleen (across river from Ferry). Some man-made rock weirs have caused slowing of river flow, resulting in siltation, excess vegetation and raising of water level during both normal and flood flows. This is an intricate man-influenced system and we look forward to ongoing detailed consultation. We would stress that dredging in any form is not an option.
- As a family we chose to make Castleconnell our home because of the amazing location that the River Shannon provides for Kayaking activities. We also regularly swim in the river and enjoy walks along the bank.
 - Our family are all involved in Kayaking and we are founder members of the Junior section of the Limerick Kayaking Club helping to make this fantastic sport accessible to children and adults in the Castleconnell area and beyond. We are actively involved in river clean ups and measures to protect the river.
 - The River Shannon at Castleconnell is an amazing natural resource and any measures designed to protect the village from flooding should take into account all the user groups for whom the river is such an important amenity.
 - We would like the scheme to consider and consult with Kayaking groups before carrying out any instream works in the river that could affect the quality of the whitewater paddling experience. This would include any changes to river flows, moving boulders, inserting any objects etc.
 - If funds allow for bankside works the car park at the end of New Garden Road (Clareville) beside the river should be upgraded to provide a better experience for all river users.
- Science based solutions are best as opposed to engineering ones:
 - Dredging would be a disaster and cause collateral damage.
 - Weirs upstream of footbridge could be removed.
 - Look at land use along river – too much drainage of wet lands.
 - Allow more moderate flooding at times of the year to curb excessive vegetation and growth or increase statutory flow from 10cumecs.
 - Gouig Bog is being excavated at industrial levels – must exacerbate flooding.
 - Re-wilding and re-wetting are long term and cheap solutions.
 - Planning – disastrous planning decisions re housing/development.
- I would hate to see anything happen to the very distinctive riverfront walls. These are a definite part of the character of Castleconnell. A concrete wall in that location anywhere would be very obtrusive.
 - The slip on the Mall (sometimes known as Broderick's slip): I use this slip to launch my river boats, cedar canoe and traditional Castleconnell Cot. My family have launched our boats there for at least four generations, so I would not like to see that slip further modified, or access impeded.
 - I would not like to see the trout and salmon streams affected.

- Subject to protection of wildlife habitats and in particular the salmon pools, we favour some removal of obstacles to the free flow of the river upstream and perhaps downstream of Island House (IH). In particular, the trees etc. obstructing the free flow of the river under the bridge from Cloon Island to the smaller island (the little island) should be removed and an ongoing program of river maintenance implemented. We are opposed to the elimination of the little island and/or access to it and the concrete structures on either side of the bridge to the little island including in particular those associated with the eel fishery – they are of historical significance and should be preserved.
- The River Shannon at Castleconnell is one of the premier sites in Ireland for Kayak and Canoe skills training. It is unique in that it is the only river location in Ireland that holds a minimum water flow providing whitewater throughout the summer. Kayakers are probably the single biggest user group of the river outside of recreational walkers. The river is used regularly by Kilfinane OETC as well as a number of clubs with whom we have close contact – Limerick Kayak Senior and Junior Clubs, Limerick Kayaking Academy, Bruff Scouts, Shannon Paddlers, UL Kayak Club, Canoeing Ireland and many visiting groups. Kayaking is a sport for life and the age range of user groups in Castleconnell range from 7 years up to adults in retirement.
 - **[Name removed]** would request that the importance of the river as a kayaking amenity be considered and consultation be carried out with the kayaking community before any instream works take place.
 - It is important to highlight that instream works could negatively impact on river features for kayaking however with planned consultation works could take place that both alleviate flood risk and protect or improve river features for paddle sports. Kayak instructors and experienced paddlers will have an intimate knowledge of the river and high-level understanding of river flows and choke points which are causing flooding, combined with an ingrained respect for the river and environment.
 - **[Name removed]** staff have been involved with Limerick County Council and the Water and Communities Office to carry out works at egress point at Clareville, look at access points and issues and proposals for bio-security measures. We consider the river to be an extremely important natural amenity for walkers, kayakers, rowers, open water swimmers and anglers as well as being a very important natural habitat.
 - We would ask that consideration is given to improving access and egress points and parking particularly at the Ferry Car park and Clareville waterworks.
- The present Mall wall does not have the capacity to protect the village in a secure way. In my view the present wall should be preserved if possible and a reinforced concrete wall capable of dealing with the high water levels and beyond – as was experienced in 2015 – should be constructed behind it. I think it's vital to secure the Mall road and thus the village also from extreme flood as it seems the present proposals could not cope with a flood as high or higher than 2015.
- We can find nothing in the preliminary report to show mitigation measures on the Mall road wall. This is unfathomable considering the lengths Limerick City & Co Council go to each flood to try support this 'bearing all the load' wall and keep the raging waters out. The new flood wall in the proposal document only goes from Mahers Pub to Island House. In 2015 for example, floods had the water level near the top of the wall all along the Mall. Pumps were going night and day for weeks to keep out the water. 2 tonne sandbags a meter apart, both then and most recently in early 2020, stood against the Mall wall as support against the strength of the water. If this wall collapses there will be huge damage throughout the village. There are also at present gaps (including a driveway) in this wall. They have been filled with sandbags in past to attempt to bridge the breach.
 - We propose that the only solution is a floodwall of reinforced concrete be built behind this historic stone wall and that the stone wall height is increased somewhat to mask it.
 - If water levels of the future reach the water levels of the past (and there is no reason why they wouldn't)- without massive pump support this stone wall as it stands bearing the weight of high flood waters, is like a pressure valve waiting to burst.
 - Towards the end of the Mall properties on the edge of the water, many/most of which have required pumps in each backyard to try keep out the water, so as to prevent their homes being destroyed.

- A reinforced concrete flood wall along the Mall from Island House continuing round the properties until the curved red roof house appears vital. Further properties continuing along riverbank are in fragile locations. Extended floodwall/embankments, as surveys deem fit are proposed by us.
- The Mall stone wall, left without such serious mitigation of a flood wall is a liability to the safety of the entire village, and its own longevity. The reinforced concrete floodwall can be masked by the historic stone wall on the Mall, raised by another 30-50cm of stone cap.
- Regarding vegetation on the Mall: 30 years ago there was a clear view of the river and the little islands where birds nest, all along the Mall road. This is now 75% eliminated by massive growth of random tree/vegetation on Mall bank. This should be thinned/cleared according to ecological/structural/scenic requirement. 'New' trees have grown very near wall, thus undermining its structure. Our property 'looks' directly 'onto the river'. But over the years this random uncontrolled growth has obliterated the view we and the public walking the Mall used enjoy of the river. Now we all look on trees from most angles, not water! I also note bird life on the river is far less abundant. In the 1980's I counted, as a teenager, 40 swans from my desk. Now from the same desk – is no view of river and when walking the length of river 3-4 pairs of swans at present at max.
- Lacka Resident:
 - Our house is situated on the river, as such, most of the flood barriers etc. would not be suitable in terms of mitigation for us. Therefore, in our view, the most important thing would be some sort of drainage system/pump system/divert to avoid the river flood/build-up altogether.
- I would like to know what is planned in the Lacka area of Castleconnell as we are on the river and would be disappointed if a wall was being built which would block our beautiful views.
- River access and egress for kayaks and canoes at [Ferry Bridge carpark, the cul-de-sac at Clareville Water Treatment plant and Worrels End].
 - Ensuring that these point the river banks are protected from bank erosion.
 - That water levels do not drop below the current summer levels.
 - That any modification proposed are canoe and kayaking friendly and do not create any danger zones for kayakers and canoeist that navigate these sections of the river.
 - The [Ferry Bridge carpark to the cul-de-sac at Clareville Water Treatment plant and the Worrels End to the Ferry Bridge Carpark] sections of the river are regularly navigated by local kayaking clubs, Limerick Kayaking Academy, Limerick Kayak Club, Limerick Kayaking Junior Club, University of Limerick Kayak Club and the outdoor education centres.
 - Kayaking clubs and ODEC from all around the country also use these section of the river all year round.
 - The section from The Ferry Bridge to Clareville water treatment is the most important kayaking and canoe section of the river in the county for training and coaching. White water races are regularly run on this section of the river. If the flood relief could improve and enhance the river for kayaking that would be a bonus the kayaking community country wide.
- There will be an opportunity of enhancing the walks along the Shannon from Castleconnell to O'Briensbridge. This would build on Castleconnell reputation of been a sporting village that would encourage more walking, running and cycling if the looped walks were provided as part of the flood relief scheme. In addition, looped walks would inspire tourism to Castleconnell.
 - Castleconnell is a village that seems to be losing its connection to the River Shannon. In the 1900's, this area was a world famous salmon fishery that had uniquely large salmon – which according to Arthur Went Fisheries – Dept. Biologist at the time, declined at the same time as the introduction of Ardnacrusha HE PowerStation. However, the Shannon here now is a private ESB fishery and Salmon stocks are now so vulnerable that the fishery is closed for them as part of their conservation. Angling is becoming exclusive and scarce at the moment.

- However, it is vitally important that the Shannon habitats are protected. The riparian areas, and instream islands around Castleconnell have habitat vegetation communities that are undermanaged and are consequently changing from reed and large sedge swamps to riparian woodland and becoming a woodland climax community. I would like to see routine maintenance of the riparian areas of the Shannon happening on a yearly basis after the works have been completed in the interests of biodiversity and fisheries.
- The slipway at the World's End is in need of repair, and it is too steep and tight to turn. The Castleconnell boat club is becoming a world famous rowing club and it needs a slipway, and floating pontoons to make Nationwide rowing events easier on the rowers and volunteers involved. The Castleconnell Club House floods out every year and costs a lot in terms of volunteer's money and time to make it fit for purpose again. A flood wall around these premises would help also.
- This section of river [from the ferry bridge car park to Clareville WTW] is used by **[Name removed]** throughout the year but in particular from April through to September for the training and development of our junior members ranging in ages from 7-18. The River Shannon provides a great amenity for this important development for our young members with its natural features to support the skills needed in kayaking.

The majority of these members are living locally in the surrounding areas of Castleconnell and are very aware of the difficulties of flooding and the dangers to its residents. Members would like their input in the event that the course of the river or features may change as these changes may possess a danger to Kayakers in the future.

Instructors from **[Name removed]** regularly remind our young members of the importance of the River Shannon. This takes into consideration Litter, Biodiversity and the importance of wildlife on the Shannon.

The fact that Clareville water works provides water to households and commercial premises in the Limerick area is most important in our approach to the sustainability of the River Shannon. Maintaining a high level of water quality is very important.

- **[Name removed]** has a very active club and member base in Castleconnell and the wider Limerick area. The clubs and organisations regularly using the river include Limerick Kayak Club, Limerick Academy Kayaking, University of Limerick Kayak Club, Shannon Paddlers, Kilfinane Outdoor Education Centre and UL activity centre. These clubs provide kayaking opportunities for residents of Castleconnell and the wider area to access paddlesports and have a particularly active base of local children paddling. The River Shannon is an extremely important amenity for our clubs and members in the Limerick area and further afield. The size of the Shannon makes it one of the very few rivers in the country where whitewater paddling can take place all year round allowing for skills and safety training even in the summer. We would request that **[Name removed]** and its members organisations above are consulted in advance of any specific instream measures taking place that could alter or change the character and volume of river flows and whitewater features such as rapids and drops, particularly in the stretch between the ferry car park and Clareville. We would request that consideration is given to the high level of use for the sport of kayaking and that the Shannon at Castleconnell is the only river in the region suitable for moving water paddling for much of the year. In addressing the issue of flood relief, it may be possible that instream works could be used to optimise river features for kayaking and canoeing activities and this should be considered for all works. In all cases instream works should take into account the safety of Kayakers and Canoeists and not pose a hazard to them. **[Name removed]** is aware that its member clubs are part of the local community and actively engage to provide opportunities for sport and competition, carry out river clean ups and charity events and have engaged with Limerick County Council and the Local Authority Waters Programme to address access/ egress concerns, environmental and biosecurity issues. Access and egress points for paddle sports would benefit from any improvements that may be possible within the scope of this scheme such as launch points, universal access and parking.
- I am writing as a matter of urgency regarding the proposed plans to manage the risk associated with our location. We have been living here for the last 13 years and in the past, we have been severely affected by the floods. Our home is on the bank of the river and has suffered water penetration many times due to the lack of adequate protective barriers.

I would urgently request flood preventative measures to protect **[House name removed]**. I would like to request individual property protection to ensure the architectural interest is protected, conserved and maintained, as part of Limerick's cultural heritage.

- I would also request flood walls, dredging and channel cleaning to the river area to the front of the boundary wall. There is a small island inlet in front conserving natural habitat and existing ecosystem.
 - Lastly, I would request the stream which flows through our property be assessed. This has been problematic with floods as it retains water during flooding.
 - I am appealing to please consider us for some form of relief to protect a building which is our family home and furthermore, a building of significant architectural interest.
- Protection for houses in Coolbane Wood from flooding.
 - This section of river is used by a lot of different groups of kayakers from around limerick, ourselves **[Name removed]** Senior and junior sections, Limerick Academy and scouts kayaking, Bruff Scouts, UL kayak club, Shannon paddlers, Kilfinane OETC just to name a few along with visiting kayakers from other parts of the country. It is a river that can be paddled all year round without any extra rainfall which makes it an extremely important resource for peoples health, fitness and wellbeing.

The features that are present in the river and along its course make for a great practice grounds for young and old, for all abilities. Changes to the river could effect these features and how the water flows work in certain areas. Taking this into account any works that may be done in the river could be used to optimise and improve the potential for all river users.

We would also have concerns over access that may be blocked due to flood defences and debris that may be left in the river or just exposed hazards such as re-bar which can be found protruding on many rivers.

3.1.3 In your opinion, how important are the following in the development of a Flood Relief Scheme?
The responses for each of the options given in the questionnaire are presented in the Figures below.

Figure 3-2: Respondent’s priorities in the development of a Flood Relief Scheme (Q3, Points 1-5)

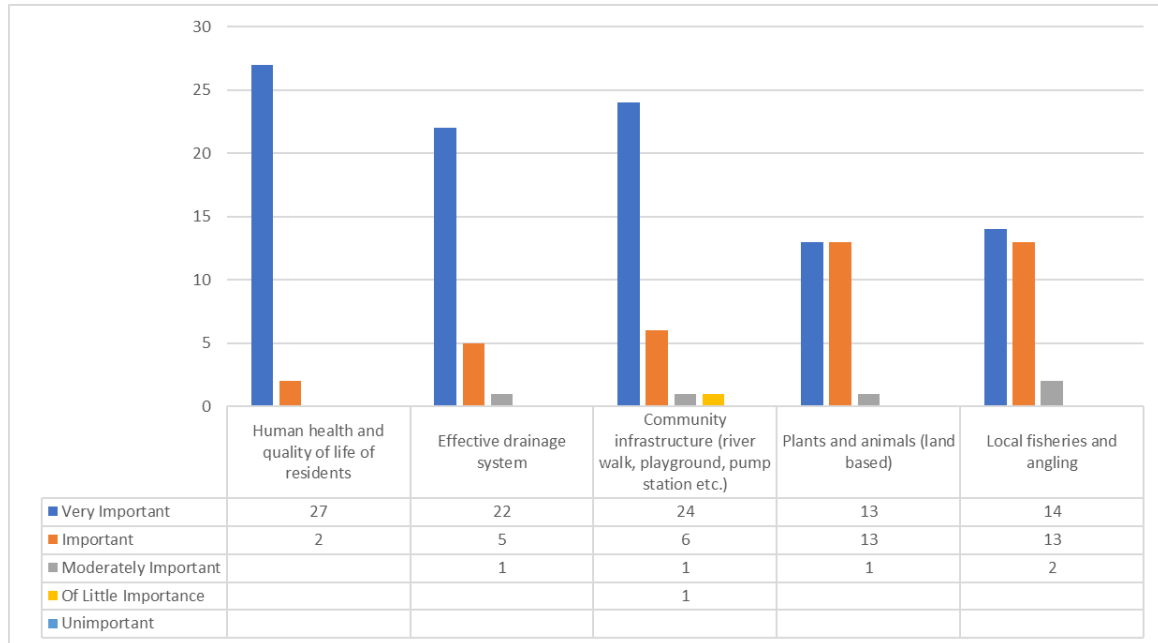


Figure 3-3: Respondent’s priorities in the development of a Flood Relief Scheme (Q3, Points 6-10)

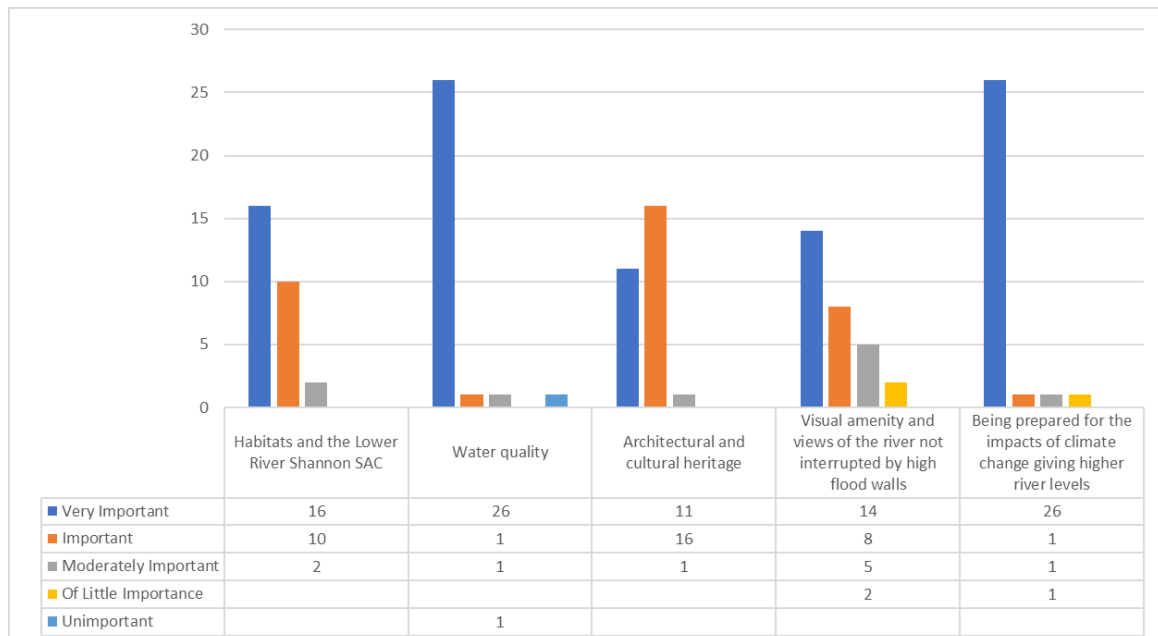
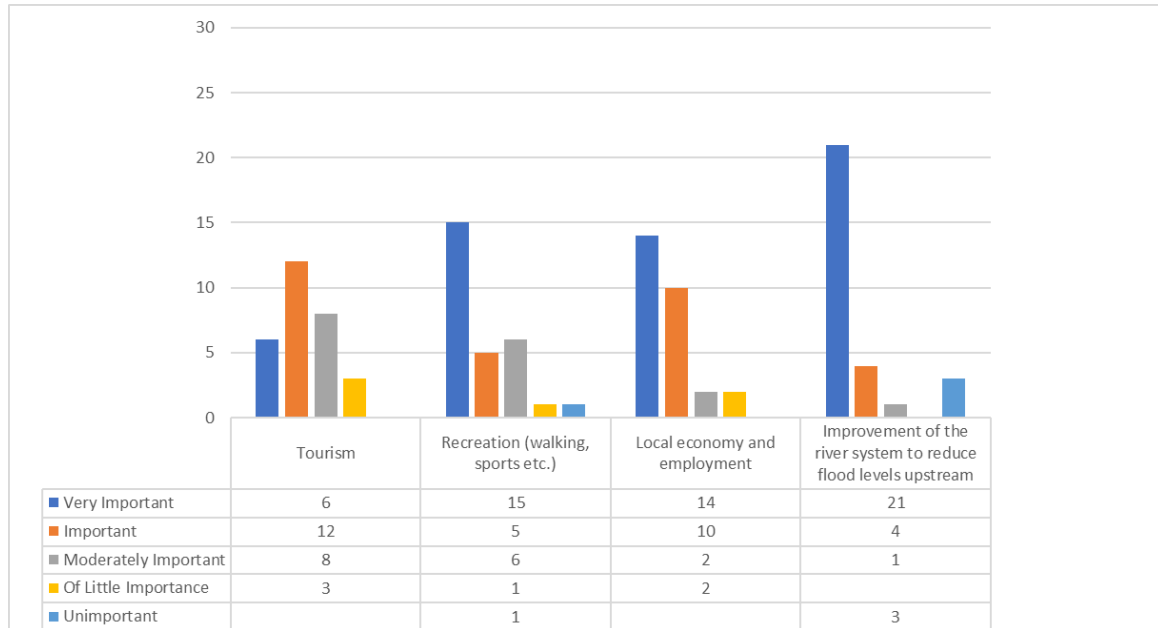


Figure 3-4: Respondent's priorities in the development of a Flood Relief Scheme (Q3, Points 11-14)



3.1.4 Please indicate which best describes you

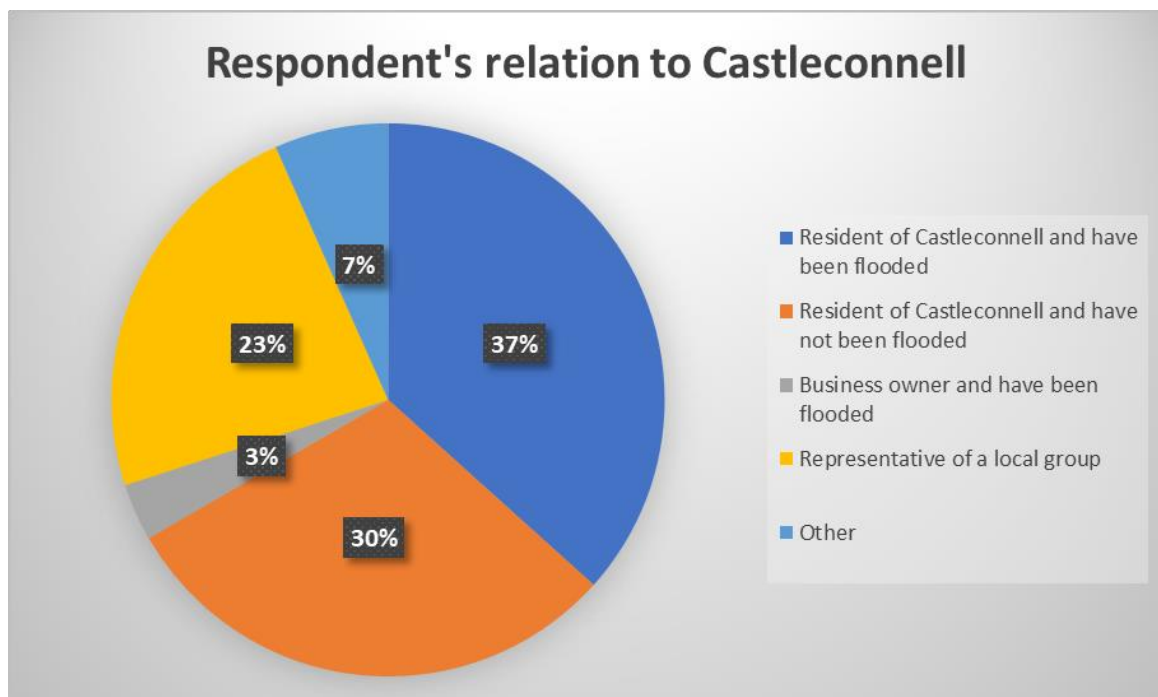
Figure 3-5 illustrates the respondent's relation to Castleconnell. Of those who flooded, all but one were reported to be in 2009.

Other floods were experienced in 2010, 2015, 2016 and 2020. One resident stated that their property has flooded on more than six occasions. While 38% (11 nr.) residents reported flooding, not all experienced internal property flooding.

Some residents reported driveways and gardens flooding with flood waters coming within 'millimetres' of some houses.

Many residents that had not been flooded reported that their houses were sandbagged in recent flood events.

Figure 3-5: Respondent's relation to Castleconnell



3.1.5 Please record your experiences of flooding and any comments regarding the proposed scheme.

There were a range of experiences of flooding and comments regarding the proposed scheme. Rather than try to group responses, relevant information is listed hereunder and in no particular order.

- The last flooding we had to have sandbags outside our front door for a number of weeks and we were very worried what would happen if we did get flooded. We only moved here in Nov 19.
- Proposed scheme will probably become more important in time, but effective control of Lough Derg water levels by the ESB, particularly during the winter months is essential. Lough Derg should be considered as a giant floodplain and controlled accordingly. We are also extremely concerned to discover that for house insurance purposes we are now considered to be on a floodplain and have been refused a quote on that basis. Will this scheme change that?
- The water came into the car park of the credit union which is directly in front of my home although a little lower than my home. The fear of going to bed not knowing how it was going to be in the morning.
- Coolbane Wood Resident:
 - 2009 worst year. Flooding stopped just short of our house, which was sandbagged and boarded. Public road and drive flooded – access only through garden of friends reached through lane beside Guerin’s Pub. Flooding has occurred a few times since, but not so bad as in 2009. Road access blocked from Castle Oaks side but possible from school/station side. Field at rear of our houses becomes a lake most years.
- The Boat Club in Castleconnell has been flooded on a number of previous occasions: 1995, 1999, 2009, 2016 and 2020.
 - Much damage has been done to the entire Clubhouse which is now undergoing a total refurbishment at considerable expense because of the most recent flooding.
 - Our Club athletes, including our high performance international rowers, have lost months of valuable training time both in the Club gym and on the river: the floods have rendered the Clubhouse unusable and the slipway inaccessible. This will seriously impact on their respective performances at the Olympics, World Championships, European competitions and the National Championships.
 - With over 150 registered members, from twelve-year-old juniors to 70+ year- old senior masters, our Castleconnell Club has the largest number of registered rowers of any club with Rowing Ireland, the National Governing body for Rowing in Ireland (North and South).
- Meadowbrook Resident:
 - My family were out of our home for 4 months during 2009/10.
 - Temporary pumps outside the front door have prevented damage to the house in 2015 and 2019/20.
 - No insurance cover for flooding and people buying a house in Meadowbrook need cash as a result.
 - Affecting the value of houses also.
 - Not good for our mental health situation.
 - Our end boundary wall needs replacing/reinforcing.
- **[Name removed]** are currently in the preplanning stage after preliminary securing a site from Limerick County Council for a new Kayaking development in proximity to the River Shannon in **[Address removed]**.
 - The new development will bolster the well-established sport of Kayaking on the River Shannon, specifically in Castleconnell and will form part of the overall development of the Sport of Kayaking in the Munster region. This will provide the sport to all members of the community with various sport disciplines, such as Canoe Polo, Freestyle, Paddle Surf, Marathon Racing, Canoeing Sprint Racing (Olympic Sport) Canoe Slalom (Olympic sport) Canadian Canoeing.
 - **[Name removed]** ask, that when considering the design of the flood relief scheme, that you consider other impacts arising from the great natural resource such as the

benefit to the community by living in proximity to the River Shannon. The longstanding fears of flooding could somehow be put in balance through natural wellbeing and by wellness both on and near the water, also the proven benefits of living near water through recreation and sport.

- This flood relief scheme is a perfect opportunity to address the fundamental issue of protecting property and people's homes but also an opportunity to enhance their lives.
- The Mall Resident:
 - We have on two occasions during flooding events emptied our house of all the downstairs furniture and put it into storage for a number of weeks. The stress of this cannot be quantified. Prior to 2009 there was no history of flooding recorded at this property. As a result of that we are unable to get flood insurance which in turn deprives us of my peace of mind.
- House at Hermitage Lane – Water came to 25mm of floor level.
- Mall field is zoned in flood area and this is not the case.
- Meadowbrook Resident:
 - In November 2009 my house was flooded. Even though we were given sand bags it did not stop the water from coming in. My sitting room, hall and kitchen went under. I had to evacuate for six weeks. However, I got through it with help from fiends, family and council. Hope everything goes well for the developing of the scheme.
- The current flood control regime operated by ESB whereby the “old river” channel is used only as a spillway means that the Castleconnell River rarely floods, but when it does it is often a large flood of short duration. This has the effect of allowing vegetation (trees) to grow along/across the weirs, and into the sides of streams, so that when a really large flood comes, the channel is too constricted. Some weirs and unintended tree growth on weirs and within flood margins of formerly high-flow velocity streams has had the effect of slowing normal flow as well as flood flow, thus increasing flood levels. Rectifying these matters would obviate the need for expensive engineering interventions. A minor maintenance budget would be required.
- We have experienced a number of flood events in Castleconnell over the past number of years. In the winter 2019/20 excellent work was carried out by Limerick County Council, the Army and other local bodies to protect the village, homes and businesses.
 - However our experience is that the timing of water releases from Parteen Weir into the natural course of the river is generally very late into a flood event and that pre-emptive measures to allow water to run off well in advance of heavy rains would be a much more effective strategy. This may in fact prevent any flooding in the village or the need to take emergency action such as barriers and pumping.
 - This would also provide a more natural flow of water for the river which should naturally rise and fall with rains instead of being kept at an artificially low level throughout the winter. This would surely be a better environmental approach and help to keep the river channels clear.
- Buildings on flood plains in village include Meadowbrook, SuperValu, Coolbane Wood, Tonville, Houses on Mall. Personally remember back as far as mid 1970's – regular flooding in these areas.
 - Huge areas of wetlands in the area have been drained intensively, no compensatory measures to help hold water back during wet periods.
 - River banks and islands are all unrecognisable from 30/40 years ago.
 - ESB have abdicated responsibility for the fishery, thus there is no proper input from them i.e. they used have full time fishery officer/manager – obliged under S8 1935 Fishery Act.
- Flooding affects us in **[House name removed]** in 2 ways.
 - One is that when the roadway, half way between Mahers Pub and Island House gate floods, we have to allow pedestrians and even vehicles through our garden, which gets them around the flood until it gets too high at Cloon Well, and at that point we are marooned ourselves.

- In the past (not in last 2 major floods) if groundwater is impounded by the Mall, and especially Island House wall, the water table rises and the cellars of Tontines Houses are liable to flood. This would obviously be exacerbated if a concrete wall was inserted between us and the river. We have not had a cellar flood in many decades, and then it may have been caused by new sewerage pipes.
- **[House name removed]** is not prone to flooding but part of the surrounding c.9 acres is. Some of this is a flood plain and is woodland and does not need to be protected from flooding. However, part of our field and driveway have been severely flooded in the past, such that access to **[House name removed]** became impossible and we had to be evacuated twice. In the most recent flood, LC&CC maintained access to **[House name removed]** by a combination of pumping and erection of temporary flood defences. We understand that the proposed flood protection measures are designed to protect both us and the village from future flooding. To that end, we favour **[illegible]** the concept of constructing a wall (subject to agreement on its style being consistent with the “battlements” on the bridge over the stream and agreement on its height) along the **[Name removed]** alongside the field but remain unconvinced that it should extend beyond this point. If desired, we would have no objection in principle to a wall being built from where the stream re-enters the Shannon as far as the rear of Maher’s Pub.

We note that mention is not made of the wall along the Mall as far as Mall House and believe that consideration should be given to strengthening it.

- The natural river channel of the Shannon at Castleconnell has become very overgrown with trees and small islands building up. In some sections there is forest where there would naturally have been open river.
 - This could be alleviated by raising the outflow from Parteen weir to the river above the minimum level of 10 cumecs for periods of the winter. This would mimic a more natural river flow and help reduce vegetation build up as well as reducing water levels upstream.
 - At present the natural river is maintained at a low level all year round and only raised during flood events, when it is raised quickly and lowered quickly afterwards. This would not be the natural pattern for a river of this size and gradient.
 - It would appear that earlier and more gradual release of water in winter to lower the levels of Lough Derg in advance of forecasted rain would significantly decrease the flood risk to Castleconnell, Limerick City and upriver towns.
 - A clear main channel for the river with strong glows in addition to flood channels that remain clear of vegetation should be the first line of defence against flooding in Castleconell.
 - **[Name removed]** would request that the proposed scheme consider the importance of the River Shannon as not only an important habitat but an extremely important resource for education and recreation for many kayaking and other water user groups. In designing the flood relief scheme to protect Castleconnell and other areas there is an opportunity to enhance this fantastic natural resource.
- In 2009 the Mall road flooded to such an extent no car could pass it. We parked our vehicles elsewhere and waded through and walked up our driveway in wellington boots on foot. Our house is the highest along the road, thus we did not ourselves flood. Neighbours were in serious danger.
- The proposed scheme has nothing in the publicly provided document to as of yet suggest comprehensive, thorough, or even cursory attention is intending on being paid to the mall road wall and it’s untenable/essential role in protection of the village in holding back the waters come severe flood as has been seen before and shall be seen more or less again. We need structure that is reliable, not luck, nor as a singular solution - sandbags, split, every single one of them by fun pranksters who thought to tear sand bags apart some years back in a recent flood all along the Mall.
- Lacka Resident:
 - Our house is positioned on the river but is built high up, therefore the garden becomes completely flooded but luckily has not entered the house. However, it has come extremely close twice in recent years (within millimetres).
 - We require a new manhole outside our front house gate, to stop the flood water coming down our drive and damaging house foundations.

- Lacka Resident:
 - In 2009/10 the garden was completely flooded but fortunately did not come into the house. The water was higher than the road so the river was flowing in to the garden as well as completely covering the Mall bordering the river.
 - In 2015/16 and 2019/20 we were spared the worst of the flooding by the pump which was supplied by the council, and which contained the flood waters to the front garden.
- At normal water level kayakers grade this section of the river as class 2/3. During high flooding it class 4/5 and should only be kayaked who are of L4 + standard. (There is 5 skills level of trained kayaker). The main problem we experience is the raw sewage that get into the river system. I personally witnessed sewage flowing into the Ferry Bridge Carpark during one flood it would seem that the local sewage system could not cope. There is also a very strong smell of farm effluent from the river water that I presume is from slurry tanks that have been breach by the flood waters.
- Four massive floods in last 11 years. First flood was in 2009, prevented traffic going to village via 'the elvers' road.
 - Subsequent floods have been well managed and pumps have been deployed which kept elvers road open.
 - The flooding affected the Castleconnell community as it made us feel vulnerable, worried, helpless and were empathetic to other households more severely affected and cut off. All insurances for our homes were affected by flooding – even though we were not directly affected by the floods.
 - Routine sensitive pruning of riparian woodland zone and maintenance of riparian zone of river will also assist in flood management for this area.
- As we are all very much aware of climate change and its effect especially with higher rainfall which can be seen as the main cause of Flooding. Preventative measures may help in the prevention of major flooding to the Castleconnell area and down river. This includes the monitoring of rain forecast along with the safe increase of discharge from the Parteen Weir as necessary.
 - The regular increased discharge may help decrease cultivation and restrictions which can be a cause of the build-up of debris on the river as this can be seen clearly in low waters.
 - We do feel more regular release of water to mimic the more natural flows of a river could greatly help the river and its flooding issues as well creating a more natural river environment for all river plants and animals.
- **[Name removed]** would support the view of our members that increasing the outflow from Parteen Weir to the natural river at intervals throughout the year when water levels allow would help to keep river channels clear and prevent build-up of vegetation, thus reducing choke points during times of flood. This would also improve the kayaking experience and reduce water levels upstream when needed. We would again highlight the importance of the Shannon at Castleconnell for the sport and recreation of Canoeing. There is potential to not only maintain the quality of this fantastic amenity but also to improve it and develop a world class amenity. We would request that **[Name removed]** and our member organisations are consulted at all appropriate stages of the project and particularly in relation to any instream works or works at access and egress points
- Our Georgian home sits on the banks of the River Shannon. A low, stone boundary wall is all that separates our home from the river. We have experienced two flooding's since we moved here thirteen years ago.
 - As you can see from provided photos, our boundary wall from the Shannon offers minimal security against the risk of flooding. In 2016, our conservatory flooded. The water also surrounded the front and sides of building. These flooding's have caused great stress and anxiety, disrupting our lives and livelihood. This caused damage to the property, dealing with the flood and leading with the consequences of water damage and aftermath and clean up.
 - I would please request the flood relief scheme to include protective measures to preserve and conserve this country house, our family home. This is now an annual

worry and stress as climate change continues to impact our environment and frequent flooding is increasingly inevitable.

- Regarding the proposed scheme, I would plead that we be considered for individual property protection and flood wall barrier.
- In 2009 it came very close but has been well managed in recent times since then reducing the impact of flooding in the last number of years.
- Flooding is something that naturally occurs on all rivers on a regular basis. Flooding on the river Shannon should be the same but because the amount of water is controlled, the water level for much of the year remains the same at a fairly low level with very little change. Due to these lower levels a lot of the year round, vegetation and trees have free rain to grow up and block channels and narrow the river. When waters are released to increase the flow these obstructions can then cause an issue with pushing the river up and out thus causing flooding. This vegetation also collects more debris that flows down stream forming mini islands that also contributes to flooding. If these trees and vegetation that can be situated in the river where to be removed it would also increase flows helping to decrease the flooding.
- We do feel more regular releases of water to mimic the more natural flows of a river could greatly help the river and its flooding issues as well creating a more natural river environment for all river plants and animals.

4 Summary

While a wide range of suggestions for specific items to be taken into account when designing the Flood Relief Scheme, and reasons as to why flooding has become such a large problem in Castleconnell in recent years were submitted, some items featured in more than one submission. These have been outlined below.

4.1 ESB management of Lough Derg and outflow from Parteen Weir

Many respondents are of the opinion that mismanagement of water levels at Lough Derg increases the flood risk to Castleconnell. It is believed that ESB retain the water level at Lough Derg at the maximum levels allowed by law and when a prolonged period of rain occurs, large discharges from Parteen Weir result in flooding downstream. Effective control of Lough Derg water levels by ESB, particularly during winter months, is essential.

4.2 Statutory minimum flow in the 'Old Shannon'

A large number of returned questionnaires quoted excessive vegetation growth and siltation as a factor that influences flood levels in the village. Many believe that this is due to the reduced flow of just 10 cumecs for much of the year. Some suggested that the river has been neglected since the Shannon Scheme was constructed while others proposed a regime that allows more moderate flooding at times of the year to curb excessive vegetation growth.

4.3 Removal of instream features

Many respondents believe that instream features such as man-made rock weirs, rock outcrops and overgrowth have caused slowing of the river, resulting in further siltation and excess vegetation growth, in turn raising water levels during flood events.

4.4 The Mall wall

Many residents expressed their concern that the Mall road was not included in the scheme proposal included in the brochure pack. Most feel that it is vital to protect the Mall road in full as well as the properties to the north of it.

It was made clear that many are also concerned over the structural stability of the Mall wall and noted that large sandbags have been placed in front of the wall in recent flood events 'to support it'.

Most respondents suggested construction of a reinforced concrete wall behind the existing Mall wall, and raising of the existing stone wall to mask it. It was made clear that the existing stone wall is of cultural and architectural significance to the residents who wish to retain it.

4.5 Other suggestions

- Some respondents expressed that they would not be in favour of dredging the river;
- Most kayaking/canoeing groups requested that they are considered in the solution and consulted before any instream works take place. They further suggested that flood relief measures could be used to optimise river features for kayaking and canoeing;
- An on-going programme of river maintenance was suggested;
- Improvement of both the foul and storm drainage systems was suggested as flooding of manholes has been problematic in previous flood events;
- Protection of salmon and trout spawns and Shannon habitats;
- Individual Property Protection was requested where the Flood Relief Scheme will not protect certain properties;
- Excess drainage of wetlands was stated as having contributed to the flooding problems in Castleconnell by one respondent.

Appendices

A Brochure Drop Area





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