

Main Settlements to Consider for Aberdeenshire FIRS

Admin Area	Settlement	Site	Proposal	MIR proposal Houses	MIR proposal employment	Grid Reference	Water Treatment Works	Waste Water Treatment Works	Water Comments	Waste Water Comments
Banff and Buchan	Aberchirder	BB54	Housing	30		362099 852575	Turriff WTW	Aberchirder WWTW	There is currently sufficient capacity at Turriff WTW. Only one facilitation application has been received for Aberchirder in the last few years. Sites BB41 and BB53 are served by Aberchirder Maunderlea Water Supply Zone. The height levels for the developments would need to be looked into as the re-zoning of water supply zones may be required in order for the sites to receive adequate water pressure from the serving service reservoir. Site BB54 should be ok.	There is currently no treatment capacity available. Fairhurst have already approached Scottish Water regarding developing one of these sites. They will be knocking down a residential home for the elderly and building houses, so this would be close to like-for-like, but surface water will be removed in any new development. They plan to build approximately 40hu. Growth will be required to accommodate this new development. There are surcharge issues south of the settlement, before the WWTW. The network in this area is ok.
Banff and Buchan	Aberchirder	BB41	Housing	30	362910 853036	Turriff WTW	Aberchirder WWTW			
Banff and Buchan	Aberchirder	BB53	Housing	40-50	362910 853036	Turriff WTW	Aberchirder WWTW			
Banff and Buchan	Banff	BB107	Housing/Mixed Use	80		367933 863742	Gallowhill WTW	Moray PFI - Banff Macduff WWTW	Gallowhill WTW is supplemented by water from Turriff WTW. Growth may be required to accommodate all proposed growth. No supply issues that we are aware of at present. Not aware of any network issues.	Treatment isn't an issue for Banff as this settlement drains to Moray PFI - Banff Macduff WWTW, which currently has sufficient capacity. The pumping station here may need to be upgraded for storage, however this is a relatively small issue. Sites BB20, BB63 and BB107, which are positioned in town, would need a Drainage Impact Assessment as there are flooding issues. Site BB52, which is situated in Inverboyndie, is partly brownfield so there shouldn't be any big issues. Developments at Inverboyndie drain to Inverboyndie Pumping Station which is a PFI (Privately Funded Initiative).
Banff and Buchan	Banff	BB63	Housing (high% affordable)	80	367811 863952	Gallowhill WTW	Moray PFI - Banff Macduff WWTW			
Banff and Buchan	Banff	BB20	Housing	200	367782 864206	Gallowhill WTW	Moray PFI - Banff Macduff WWTW			
Banff and Buchan	Banff	(alp)fh1	Housing/Mixed Use	150	367717 862998	Turriff WTW	Moray PFI - Banff Macduff WWTW			
Banff and Buchan	Banff	(alp)B	Housing/Mixed use	250	367923 863148	Turriff WTW	Moray PFI - Banff Macduff WWTW			
Banff and Buchan	Cairnbulg/Inverrallochy	BB51	Mixed Use	25	Recreation and Tourist facilities at harbour	403484 865450	Forehill WTW	Fraserburgh Phingask PFI	These sites should be ok. A Water Impact Assessment would need to be carried out. A small amount of mains upsizing may be required to deal with additional flows.	Treatment capacity is currently ok as these sites drain to Fraserburgh Phingask PFI. Site BB51 would need a Drainage Impact Assessment to look at the sewers as there are flooding issues. The current size of the pumps may also need to be reviewed for each of the preferred sites. Should there be any brownfield development there will be an opportunity to remove surface water which will allow additional capacity.
Banff and Buchan	Cairnbulg/Inverrallochy	BB12	Housing	10 to 15		403889 864560	Forehill WTW	Fraserburgh Phingask PFI		
Banff and Buchan	Cairnbulg/Inverrallochy	BB25	Housing (possibility of HA co-developing)	25		404314 864663	Forehill WTW	Fraserburgh Phingask PFI		

Main Settlements to Consider for Aberdeenshire FIRS

Banff and Buchan	Fraserburgh	BB36	Mixed Use	up to 600		399282 865013	Turriff WTW	Fraserburgh Phingask PFI	Turriff WTW will need additional growth to accommodate all these proposed developments. The network is currently well supplied so there aren't any issues that we aware of.	Treatment capacity is currently ok as these sites drain to Fraserburgh Phingask PFI. Sites BB33, BB37 and BB38 lie west of the bypass and could be pumped directly to the PFI instead of going into the town's sewer system to be pumped all the way round the system before reaching the PFI. Site BB36 would need a Drainage Impact Assessment. All other sites in town (brownfield) shouldn't need Drainage Impact Assessment's. There are serious flooding issues at the harbour. Surface Water should be removed from brownfield developments.
Banff and Buchan	Fraserburgh	BB56	Offices or Retail		Offices	399851 865918	Turriff WTW	Fraserburgh Phingask PFI		
Banff and Buchan	Fraserburgh	BB35	Mixed Use		Employment and Leisure	398478 866366	Turriff WTW	Fraserburgh Phingask PFI		
Banff and Buchan	Fraserburgh	BB61	Education		Education and community uses	399223 866470	Turriff WTW	Fraserburgh Phingask PFI		
Banff and Buchan	Fraserburgh	BB60	Education		Education and community uses	398460 866539	Turriff WTW	Fraserburgh Phingask PFI		
Banff and Buchan	Fraserburgh	BB38	Mixed use	200	Employment	397876 866747	Turriff WTW	Fraserburgh Phingask PFI		
Banff and Buchan	Fraserburgh	BB37	Employment		Emp	398092 866925	Turriff WTW	Fraserburgh Phingask PFI		
Banff and Buchan	Fraserburgh	BB55	Employment		Emp	398599 867196	Turriff WTW	Fraserburgh Phingask PFI		
Banff and Buchan	Fraserburgh	BB59	Tourism		Tourism	399788 867537	Turriff WTW	Fraserburgh Phingask PFI		
Banff and Buchan	Macduff	BB62	Employment		10ha	371663 863970	Gallowhill WTW	Moray PFI - Banff Macduff WWTW		
Banff and Buchan	Macduff	BB114	Retail or Housing			370989 863369	Gallowhill WTW	Moray PFI - Banff Macduff WWTW		
Banff and Buchan	Portsoy	BB27	Housing	5 or 6		358432 866081	Turriff WTW	Portsoy Screening Station	Portsoy Damhead High Level Service Reservoir supplies the whole of Portsoy, which is supplied by Turriff WTW. There shouldn't be any pressure issues. Capacity should be ok.	Capacity for treatment at Portsoy Screening Station is ok. A Drainage Impact Assessment will be required to look at the network.
Banff and Buchan	Portsoy	BB80	Housing	80		358254 865700	Turriff WTW	Portsoy Screening Station		
Buchan	Auchnagatt	B31	mixed use	16	Business units	393001 841771	Turriff WTW	Auchnagatt Annochie Place Septic Tank	These developments will be served from Brackens Service Reservoir. We don't foresee any issues with capacity or the network. There are no issues at present.	There is currently no available capacity at Auchnagatt Annochie Place Septic Tank and there is no existing network infrastructure within the preferred sites. Scottish Water will need to raise a growth project for further capacity to be made available and the developers will be responsible for laying the infrastructure within their sites and extending it to the public septic tank. The level of development proposed will double the size of this settlement.
Buchan	Auchnagatt	B32	Housing	60		393214 842084	Turriff WTW	Auchnagatt Annochie Place Septic Tank		

Main Settlements to Consider for Aberdeenshire FIRS

Buchan	Boddam	B18	Housing	6		412855, 841960	Forehill WTW	Peterhead PFI	These small sites should be able to be accommodated without any problems.	Boddam drains to Peterhead PFI, where there is currently sufficient capacity. Site B100 is brownfield. There are currently some issues in regards to ensuring developers bring the RAF sewers up to adoptable standards. There are serious flooding issues here which need to be resolved. The smaller sites at B18 and B26 shouldn't pose any problems.
Buchan	Boddam	B26	Housing	6		412855, 841960	Forehill WTW	Peterhead PFI		
Buchan	Boddam	B100	Buchan Braes, former RAF Boddam site: Site nominated for residential development by Boddam and District Community Association	36		412986, 841979	Forehill WTW	Peterhead PFI		
Buchan	Boddam	B101	Caravan site: Site nominated for residential development by Boddam and District Community Association	8		413216, 842290	Forehill WTW	Peterhead PFI		
Buchan	Cruden Bay	B67	Mixed use	85	Employment	408155, 836295	Forehill WTW	Peterhead PFI	There shouldn't be any infrastructure or capacity problems. As development approaches our service reservoirs they will need to be aware of possible pressure issues.	A Drainage Impact Assessment will be required as there are flooding issues on Aulton Road. The treatment capacity currently available at Peterhead PFI is ok.
Buchan	Cruden Bay	B68	Housing	15		408070, 835932	Forehill WTW	Peterhead PFI		
Buchan	Hatton	B60	Employment land	0	13.7ha	405634, 837245	Forehill WTW	Hatton of Cruden WWTW	The 40hu development shouldn't be a problem. The employment land is situated at the end of the system so the water mains may need to be upsized back to trunk main in order to cope with the additional flows.	There is currently insufficient capacity at Hatton of Cruden WWTW. An SR10 project has been raised to transfer treatment to Peterhead PFI. Site B60 may need pumped to the treatment works. Site B70 is high enough on the hill so it wouldn't need pumping. A Drainage Impact Assessment would be required to check the effects of developing site B70 as there are flooding issues at Main Street and Park View.
Buchan	Hatton	B70	Housing	40		404515, 837336	Forehill WTW	Hatton of Cruden WWTW		
Buchan	Mintlaw	B50	Mixed use	150		399767, 847483	Turriff WTW	Mintlaw WWTW	There are currently network issues within site B82, B80 and B50. Development Impact Assessments have been done previously for large sites within this area. Modelling will be required to assess the infrastructure upgrades to be completed in order to accommodate new developments. Graeme Collie, Networks Service Operator, advised that site B78 should be able to be developed without issues. Site B81 looks like it is already being developed on our Geofield mapping system as it shows a new proposed water main coming off the 250mm PVC trunk main.	There is currently no remaining treatment capacity at Mintlaw WWTW for a major housing development. The situation here is influenced by a major trade effluent discharger who retains permission to discharge significant trade waste to the public sewer, while meantime choosing to tanker his trade waste off site for private disposal. Growth at Mintlaw WWTW will be required in order for further development to take place. Sites B82 and B50 could be discharged straight to the works instead of connecting to the existing infrastructure. A Drainage Impact Assessment will be required for site B78 as it's discharge will drain right through the middle of the town. It might be able to gravitate to works so will not require to be pumped. Ideally, our Asset Planner would like Mintlaw to be pumped to Peterhead PFI along with Longside.
Buchan	Mintlaw	B78	Mixed use	450		399438, 848731	Turriff WTW	Mintlaw WWTW		
Buchan	Mintlaw	B80	Mixed use	0		400060, 847905	Turriff WTW	Mintlaw WWTW		
Buchan	Mintlaw	B81	Housing	250		398838, 847991	Turriff WTW	Mintlaw WWTW		
Buchan	Mintlaw	B82	Community facilities	0		399680, 847714	Turriff WTW	Mintlaw WWTW		
Buchan	Mintlaw	B83	Employment land	0	1.9ha	398693, 848307	Turriff WTW	Mintlaw WWTW		

Main Settlements to Consider for Aberdeenshire FIRS

Buchan	Peterhead	B30	Mixed use	150 (180)		410068, 846869	Forehill WTW	Peterhead PFI	<p>Peterhead North - All of these development sites are very close to the head of works, which may cause pressure problems. Cowsrieve Service Reservoir may need to be upsized. A trunk main will be required from Cowsrieve Service Reservoir to the site (approximately 4km). It will gravitate, so does not require pumping.</p> <p>Peterhead South - There are trunk mains within this vicinity so the sites should have no problem getting serviced. Cowsrieve Service Reservoir would need to be increased to accommodate the proposed level of development.</p>	<p>All development to the right of the bypass should be pumped 1.5 miles to Upperton to reduce the distance being pumped through the combined system.</p>
Buchan	Peterhead	B40	Housing	30		410936, 845064	Forehill WTW	Peterhead PFI		
Buchan	Peterhead	B66	Mixed use	830 (1000)	Business units	410542, 847581	Forehill WTW	Peterhead PFI		
Buchan	Peterhead	B11	Industrial (Phased over 10 years - warehousing and offices)	0	44ha	410682, 843225	Forehill WTW	Peterhead PFI		
Buchan	Peterhead	B29	Retail	0		411851, 843836	Forehill WTW	Peterhead PFI		
Buchan	Peterhead	B40	Housing	200		410951, 845071	Forehill WTW	Peterhead PFI		
Buchan	Peterhead	B86	Community Facilities	0		411396, 845326	Forehill WTW	Peterhead PFI		
Buchan	Peterhead	B87	Employment land	0	14.5ha	411219, 844986	Forehill WTW	Peterhead PFI		
Buchan	Peterhead	B88	Retail and employment	0	6.3ha	410943, 844580	Forehill WTW	Peterhead PFI		
Buchan	Peterhead	B95	Housing	75		411274, 845201	Forehill WTW	Peterhead PFI		
Buchan	Stuartfield	B42	Housing	50		397734, 846192	Forehill WTW	Stuartfield WWTW	<p>These sites straddle water supply zone which are served by both Forehill WTW and Turriff WTW. Depending on the outcome of modelling, the sites could be supplied locally by the service reservoir, or if there is a local issue they can be supplied by Turiff WTW. We are not aware of any issues at present.</p>	<p>There is currently limited capacity at Stuartfield WWTW and not enough to serve 70hu. A growth project will be required to allow all of the preferred development to be supplied. Sewer infrastructure will need to be installed in the proposed sites. Pumping shouldn't be required.</p> <p>The most appropriate solution here would be to pump from Stuartfield to Mintlaw once the pumping main from Mintlaw to Peterhead (for Peterhead PFI) has been constructed.</p>
Buchan	Stuartfield	B62	Housing	54		397571, 846187	Forehill WTW	Stuartfield WWTW		
Formartine	Balmedie	F114	Employment	0	8.9	396429:816777	Inver-Mann-Turriff	Balmedie WWTW	<p>In order to accommodate 450 houses, 26ha of employment land and an academy the existing 100mm trunk main will need to be upgraded and the capacity at Hill of Keir Service Reservoir will need to be increased. Approximately 1.5km of trunk main will need to be upgraded. The worst case scenario would involve costs of £300 p/m but it would most likely cost £150 p/m. Constructing a small service reservoir could be in the region of £250,000, while a larger one would be closer to £0.5 million.</p>	<p>There is currently capacity for 500hu available from a treatment point of view. An upgrade to the works will be necessary to accommodate all preferred development sites, especially when you take the Trump Development into account. The sewers downstream will also be effected by development of this scale which will result in some sewer upgrades being required. A new pumping main may also be required, which would cost approximately £1 million.</p>
Formartine	Balmedie	F154	Community Facilities		F154 and F157 provide allocations for a new health facility and safeguard land for primary school expansion.	396999:817730	Inver-Mann-Turriff	Balmedie WWTW		
Formartine	Balmedie	F155	Employment	0	10.2	396615:816924	Inver-Mann-Turriff	Balmedie WWTW		
Formartine	Balmedie	F156	Affordable housing	25		396866:816922	Inver-Mann-Turriff	Balmedie WWTW		
Formartine	Balmedie	F157	Community Facilities		F154 and F157 provide allocations for a new health facility and safeguard land for primary school expansion.	396661 817285	Inver-Mann-Turriff	Balmedie WWTW		
Formartine	Balmedie	F166	Housing	25		396629:818433	Inver-Mann-Turriff	Balmedie WWTW		

Main Settlements to Consider for Aberdeenshire FIRS

Formartine	Blackdog	F55	Mixed use development	600		396120:814179	Inver-Mann-Turriff	Strabathie WWTW	Blackdog is supplied by a trunk main into the settlement. To supply a development of this size a new service reservoir may be required or a pressure reducing valve for the trunk main. The height of the proposed development and the flows required would dictate whether it can be served off a pressurised main. Balmedie, Blackdog, Ellon, Newburgh, Oldmeldrum and Potterton are all served by Craigie Service Reservoir, and so the combined effect of all these settlements would need to be taken into account.	Strabathie WWTW would be struggling to provide capacity for 600hu. At present it has available capacity for 100hu. An upgrade to the treatment works would be required. There is no existing infrastructure on these greenfield sites.
Formartine	Ellon	F132	Mixed use development	1200		396345:829937	Inver-Mann-Turriff	Ellon WWTW	There are currently capacity issues at the storage reservoirs, Craigie East (Ellon Low Level SR) and Newfield (Ellon High Level SR), which will require an upgrade. Any new developments will be required to contribute to extending their storage time. A river crossing may be needed to take a water main into the Cromleybank development. A new service reservoir could be built at Hill of Fechil if the height is sufficient. A new service reservoir would supply the whole zone instead of just upgrading the existing zone. It would make sense to have a new service reservoir south of the river to prevent transporting water up and back down. The existing main feed should be able to cope.	There is currently some available capacity at Ellon WWTW but not enough to serve all of the proposed development. Ellon WWTW will need to be upgraded for growth. There is currently no sewer network to the south of the river. A pumped river crossing will be required. Because of the large number of additional houses proposed, it may be preferred for a completely new works to be built south of the river. Sewer infrastructure for the development taking place north of the park and ride site may be able to gravitate.
Formartine	Ellon	F133	Employment	0	49	394018:831564	Inver-Mann-Turriff	Ellon WWTW		
Formartine	Ellon	F146	Employment	0	8.9	396700:831122	Inver-Mann-Turriff	Ellon WWTW		
Formartine	Ellon	F147	Community Facilities			397352:830493	Inver-Mann-Turriff	Ellon WWTW		
Formartine	Ellon	F148	Mixed use development	60		394980:830893	Inver-Mann-Turriff	Ellon WWTW		
Formartine	Newburgh	F139	Housing & Community Facilities	100		399438 824788	Inver-Mann-Turriff	Balmedie WWTW	A 200mm PVC water main serves Newburgh from Foveran Service Reservoir. A Water Impact Assessment may be required to see if the network can cope with an additional 100hu.	Newburgh pumps to Balmedie WWTW, which could struggle for capacity but may be able to cover 100hu in total. However, Foveran is pumped to Newburgh which would also in turn need to be pumped to Balmedie WWTW. If SEPA allows on site treatment at Foveran, which may not be likely due to the condition of Foveran Burn, Scottish Water would have to fund this Part 4 asset. However, if the solution is to continue pumping Newburgh to Balmedie WWTW this would be done at the developer's expense.
Formartine	Oldmeldrum	F107	Employment (Retail)	0	4.8	380402 827728	Inver-Mann-Turriff	Oldmeldrum WWTW	Oldmeldrum Service Reservoir has been built in the north for a Wimpey development and sized accordingly. To feed another 540hu it will need to be doubled in size. The majority of the proposed industrial development is in the south. The capacity at New Oldmelrum Service Reservoir (in south east) needs to be assessed as well as the possibility of putting in a new trunk main.	There is currently no available capacity at Oldmeldrum WWTW. There is an SR10 growth project currently being reviewed. New sewer infrastructure will need to be built for sites F149, F50 and F150 and laid to the treatment works. Site F107 could connect into the existing sewers.
Formartine	Oldmeldrum	F149	Employment	0	17.1	379863 827110	Inver-Mann-Turriff	Oldmeldrum WWTW		
Formartine	Oldmeldrum	F150	Mixed use development	340		380918 826746	Inver-Mann-Turriff	Oldmeldrum WWTW		
Formartine	Oldmeldrum	F50	Mixed use development	200		380633 826657	Inver-Mann-Turriff	Oldmeldrum WWTW		
Formartine	Potterton	F144	Community Facilities			394188 815548	Inver-Mann-Turriff	Balmedie WWTW	Potterton is fed directly from a trunk main via a pressure reducing valve. There is no storage in Potterton. The preferred sites are in the east. We are currently approaching capacity for the number of houses which can be served off a pressure reducing valve. Further development will require a new service reservoir to be built.	Potterton is pumped to Potterton Denhead, then Balhelvie which then pumps to Balmedie to be treated. This will mean that the development from Potterton, Newburgh and Balmedie will all be treated at Balmedie WWTW. An upgrade will definitely be required due to the cumulative effects of developments. Balmedie WWTW has been designed for 6000PE (approximately 2600hu), so we would need 50% growth plus capacity for the Trump Development. All three of the pumping stations (Potterton Denhead, Gourdieburn and Balhelvie) will need to be assessed. This will require huge investment. Scottish Water could look at the possibility of treating all these settlements at Nigg PFI via a trunk sewer.
Formartine	Potterton	F145	Community Facilities			394757 815415	Inver-Mann-Turriff	Balmedie WWTW		
Formartine	Potterton	F26	Mixed use development	450	Future academy site and employment	North - 394241 816081 South - 394731 814998	Inver-Mann-Turriff	Balmedie WWTW		
Formartine	Potterton	F47	Employment	0	3.6	394061 815029	Inver-Mann-Turriff	Balmedie WWTW		

Main Settlements to Consider for Aberdeenshire FIRS

Formartine	Tarves	F128	Housing	10		386127 831003	Turriff WTW	Tarves WWTW	Tulquhon Service Reservoir lies to the south of Tarves. A new service reservoir may be required to serve additional development. The proposed sites to the west of Tarves will need off-site mains extensions to connect into the existing system.	Tarves WWTW should be ok for treatment capacity. All proposed development is situated at the opposite side of the settlement from where the Wastewater Treatment Works is positioned. The existing sewers may need to be upgraded. Pumped sewers shouldn't be required as the incline should be sufficient.
Formartine	Tarves	F22	Mixed use development	100		386343 830819	Turriff WTW	Tarves WWTW		
Formartine	Turriff	F111	Housing	8		373657 849548	Turriff WTW	Turriff WWTW	Sites F36, F153 and F151 could be supplied by Prospecthill Service Reservoir, which lies to the east of these developments. Everything else could go to Brackens Service Reservoir (north east of Turriff). However, this would depend on the network and would only be able to be decided for definite after further investigation into the network and the available pressure in the mains, etc.	There is currently no available treatment capacity at Turriff WWTW. There is an SR10 project currently being reviewed, which had been deferred from SR6. There are flooding issues at the football and show grounds. A Drainage Impact Assessment would be required to look at issues for all development to the south of the A947 as they will all drain to Putachie Pumping Station, where new pumps have recently been fitted. Sites F16, F17 and F152 may be able to gravitate to sewer without the need for pumping. Sites F36, F153 and F151 should have no problems with a foul only connection.
Formartine	Turriff	F129	Mixed use development	230		373681 850196	Turriff WTW	Turriff WWTW		
Formartine	Turriff	F151	Community Facilities			372235 850622	Turriff WTW	Turriff WWTW		
Formartine	Turriff	F152	Employment	0	7	373102 850412	Turriff WTW	Turriff WWTW		
Formartine	Turriff	F153	Mixed use development	90		372095 850772	Turriff WTW	Turriff WWTW		
Formartine	Turriff	F16	Employment	0	0.9	372933 850734	Turriff WTW	Turriff WWTW		
Formartine	Turriff	F17	Employment	0	1.7	373047 850602	Turriff WTW	Turriff WWTW		
Formartine	Turriff	F179	Housing	150		373728 849959	Turriff WTW	Turriff WWTW		
Formartine	Turriff	F36	Housing	60		371996 850952	Turriff WTW	Turriff WWTW		
Formartine	Turriff	F5	Housing	50		373712 849743	Turriff WTW	Turriff WWTW		
Formartine	Turriff	F85	Housing	10		373761 849536	Turriff WTW	Turriff WWTW		
Garioch	Chapel of Garioch	28	Housing	20		371696 823804	Inver-Mann-Turriff WTW	PRIVATE	There should be no major impact from these developments.	There are no public sewers in the area. Private treatment will be required.
Garioch	Chapel of Garioch	193	Housing	50		371947 824381	Inver-Mann-Turriff WTW	PRIVATE		
Garioch	Insch	145	Housing and Employment	60 or 600+ (depending on strategy)	4ha	363215 828894	Inver-Mann-Turriff WTW	Insch WWTW	The preferred sites are north of the main settlement. There are low pressure issues further south but these are currently being resolved. This settlement is served from a trunk main through a pressure reducing valve. There is a limit to the number of houses which can be served off a PRV trunk main and so the preferred option for serving the additional development is storage through the use of a new reservoir.	There is currently treatment capacity available at Insch WWTW. However, there are problems with the sewers leading to the works, therefore the infrastructure between the developments and Wastewater Treatment Works will need to be investigated further and upgraded as required by the developer.

Main Settlements to Consider for Aberdeenshire FIRS

Garioch	Inverurie	32	Housing	1000		376221 820870	Invercannie and Mannofield WTW	Inverurie WWTW	<p>The majority of the preferred sites lie to the south of Inverurie. By upsizing Thainestone Service Reservoir it would be able to feed this zone. A dedicated trunk would be required to supply these sites. Thainestone Service Reservoir is fed from Kingshill Service Reservoir. Kingshill SR will also need to be assessed for its storage capacity.</p> <p>There are small storage tanks at Kintore, Bransbutt, Thainestone and Inverurie. It would be Scottish Water's preferred option to put a strategic solution in place to try and reduce the number of reservoirs and increase their size. The trunk main serving Inverurie appears to be ok but may need upgrading with further development, which will be costly as this is a very long trunk main. There are currently no capacity issues.</p> <p>There are a total of 1900hu preferred sites for Inverurie which approximately equates a total growth of 4400PE (population equivalent). Inverurie WWTW would need a major upgrade for growth to take into account the current Local Plan and future development. There are also hydraulic issues with capacity in various parts of the works. This settlement has been put forward for Scottish Water to carry out an investigation on the network. There could be considerable network issues which will need to be resolved for further development to take place. Developers may experience issues when trying to dispose of surface water.</p>
Garioch	Inverurie	63	Employment			377388 819232	Invercannie and Mannofield WTW	Inverurie WWTW	
Garioch	Inverurie	64	Housing	275		377041 820086	Invercannie and Mannofield WTW	Inverurie WWTW	
Garioch	Inverurie	68	Employment	275		377441 820066	Invercannie and Mannofield WTW	Inverurie WWTW	
Garioch	Inverurie	75	Employment			377966 818161	Invercannie and Mannofield WTW	Inverurie WWTW	
Garioch	Inverurie	89	Mixed use development	150	town centre development	377271 822131	Invercannie and Mannofield WTW	Inverurie WWTW	
Garioch	Inverurie	95	Employment	Can't find G95 in MIR					
Garioch	Inverurie	100	Employment			376940 818099	Invercannie and Mannofield WTW	Inverurie WWTW	
Garioch	Inverurie	101	Employment			377528 818801	Invercannie and Mannofield WTW	Inverurie WWTW	
Garioch	Inverurie	108	Housing	? Can't find on MIR					
Garioch	Inverurie	148	Housing	150		378552 822953	Invercannie and Mannofield WTW	Inverurie WWTW	
Garioch	Inverurie	164	Town Centre Expansion			377271 822131	Invercannie and Mannofield WTW	Inverurie WWTW	
Garioch	Inverurie	165	Transport Interchange			377547 821789	Invercannie and Mannofield WTW	Inverurie WWTW	
Garioch	Inverurie	166	Community Facilities		Special needs school	375290 821640	Invercannie and Mannofield WTW	Inverurie WWTW	

Main Settlements to Consider for Aberdeenshire FIRS

Garioch	Kemnay	115	Housing			373806 816451	Invercannie and Mannofield WTW	Kemnay WWTW	Kemnay is supplied by Parkhill Service Reservoir, which is fed from Thainstone Service Reservoir which is in turn fed by Kingshill Service Reservoir. Upgrades to the water mains may be required for the developments across the river (E.g. Fort Lodge, Fetternear House).	There is currently available treatment capacity at Kemnay WWTW. There is a preliminary works beside the river which pumps up past the school and to the wastewater treatment works. The sites on the west side of the river have no existing sewer infrastructure so they will have to cross the river to connect into the town's sewer system. There may be enough of an incline for the sewers to gravitate to the works. Site G181 may need to carry out mitigation work to prevent any impact on the existing network. The main issues effecting the preferred developments on the west side of the river will be laying sewer mains into Kemnay.
Garioch	Kemnay	153	Mixed use development		9ha	373426 817122	Invercannie and Mannofield WTW	Kemnay WWTW		
Garioch	Kemnay	170a	Enabling development	70 (in total between G170a,b and d)		372638 816238	Invercannie and Mannofield WTW	Kemnay WWTW		
Garioch	Kemnay	170b	Enabling development	70 (in total between G170a,b and d)		372223 816523	Invercannie and Mannofield WTW	Kemnay WWTW		
Garioch	Kemnay	170c	Enabling development		visitor centre and allotments	372351 816828	Invercannie and Mannofield WTW	Kemnay WWTW		
Garioch	Kemnay	170d	Enabling development	70 (in total between G170a,b and d)	community facilities	372852 816993	Invercannie and Mannofield WTW	Kemnay WWTW		
Garioch	Kemnay	170e	Enabling development		Business	372426 817422	Invercannie and Mannofield WTW	Kemnay WWTW		
Garioch	Kemnay	170f	Enabling development		Business	372150 828609	Invercannie and Mannofield WTW	Kemnay WWTW		
Garioch	Kemnay	181	Housing		65	373772 815624	Invercannie and Mannofield WTW	Kemnay WWTW		
Garioch	Kemnay	214	Medical Facilities		Medical Facilities	373129 815846	Invercannie and Mannofield WTW	Kemnay WWTW		
Garioch	Kintore	23	Housing and Employment	600 (between G23 and G87)	30ha (between G23 and G87)	380033 814813	Invercannie and Mannofield WTW	Inverurie WWTW	The preferred sites would need to be supplied from Glascoego Service Reservoir in order to receive adequate pressure. The service reservoir's capacity would need to be assessed and a new dedicated main would be required to serve the development. It would run approximately 2.5km.	Kintore is pumped to Inverurie WWTW which has no available capacity as a result of current development. Growth will be required for this waste water treatment works. There is one pumping station at Sunnyside which lies between the preferred developments and the transfer station. It is a very large pumping station but is not coping with current demand in the area. A pumping station and rising main upgrade will be required all the way into Inverurie.
Garioch	Kintore	87	Housing and Employment	600 (between G23 and G87)	30ha (between G23 and G87)	380033 814813	Invercannie and Mannofield WTW	Inverurie WWTW		
Garioch	Kintore	151	Community Facilities		New Secondary school	379724 815108	Invercannie and Mannofield WTW	Inverurie WWTW		
Garioch	Newmachar	8	Housing and Sports facilities		135 sports facilities	388221 819619	Inver-Mann-Turriff WTW	Newmachar WWTW	Westside Newmachar Service Reservoir has sufficient available capacity to serve some of the proposed development. A new service reservoir could ultimately be required in order to serve all of the proposed development. An assessment will need to be carried out to check the ability for the 150mm trunk main to serve these three developments.	There is currently enough capacity at Newmachar WWTW to treat 2/3 of the development identified. Growth is required at this works for all preferred sites to be served. Some of the existing sewer infrastructure may require upgrading. Infrastructure upgrades could be required all the way through the town centre. In general, there are no day-to-day issues. Site G8 could probably be accommodated without any issues.
Garioch	Newmachar	48	Housing	? Can't find on MIR						
Garioch	Newmachar	128	Housing and Employment		190 3ha	388553 820175	Inver-Mann-Turriff WTW	Newmachar WWTW		
Garioch	Newmachar	138	Housing and Community Facilities		300 new school	389023 819679	Inver-Mann-Turriff WTW	Newmachar WWTW		

Main Settlements to Consider for Aberdeenshire FIRS

Kincardie and Mearns	Auchenblae	K29	housing & employment	80		372816 779298	Whitehillocks WTW	Laurencekirk WWTW	There is currently sufficient capacity at Whitehillocks WTW to serve all of the preferred development. There is sufficient capacity in the service reservoir. Local mains reinforcement may be required depending on outcome of Flow & Pressure test or Water Impact Assessment. There are also potential low pressure problems.	Laurencekirk WWTW currently has insufficient capacity for new developments. A growth project will be required to allow further development.
Kincardie and Mearns	Auchenblae	K53	housing & employment	80		372880 779066	Whitehillocks WTW	Laurencekirk WWTW		
Kincardie and Mearns	Auchenblae	K52	housing	6		372873 778727	Whitehillocks WTW	Laurencekirk WWTW		
Kincardie and Mearns	Gordoun	K43	housing	50		382607 771285	Whitehillocks WTW	Nether Knox WWTW	There is currently sufficient capacity at Whitehillocks WTW to serve the preferred development. However, there is currently insufficient capacity in Knoxhill Service Reservoir. Storage capacity at the reservoir will need to be increased. The local mains may require reinforcement depending on outcome of Flow & Pressure test and a Water Impact Assessment, otherwise the existing low pressure problems are likely to increase.	There is currently limited capacity at Nether Knox WWTW. A growth project may be required so that all proposed development can be served. An assessment of the current available capacity at this works needs to be undertaken by Scottish Water.
Kincardie and Mearns	Gordoun	K44	Employment		Extension of industrial park	383095 771432	Whitehillocks WTW	Nether Knox WWTW		
Kincardie and Mearns	Inverbervie	K15	Employment			382540 771840	Whitehillocks WTW	Nether Knox WWTW	There is currently sufficient capacity at Whitehillocks WTW to serve these developments and there is sufficient capacity in Inverbervie Service Reservoir. Local mains reinforcement may be required depending on outcome of a Flow & Pressure test or a Water Impact Assessment. There should be no development above 55m contour line for site K15, otherwise a booster pump set will be required and the site will need to be supplied by Knoxhill Service Reservoir, which is already experiencing capacity problems. Site K60 is too high to be served by Inverbervie Service Reservoir and so will need to come off Alpity Service Reservoir which has sufficient storage.	There is currently limited capacity at Nether Knox WWTW. A growth project may be required so that all proposed development can be served. An assessment of the current available capacity at this works needs to be undertaken by Scottish Water.
Kincardie and Mearns	Inverbervie	K39	housing	25		383116 771914	Whitehillocks WTW	Nether Knox WWTW		
Kincardie and Mearns	Inverbervie	K40	housing + primary school	25		382887 771876	Whitehillocks WTW	Nether Knox WWTW		
Kincardie and Mearns	Inverbervie	K60	housing	300		382385 772727	Whitehillocks WTW	Nether Knox WWTW		
Kincardie and Mearns	Laurencekirk	K109	mixed use	885hu - either in K109 or K93	20ha replacement secondary school	372277 772537	Whitehillocks WTW	Laurencekirk WWTW	The water supply into Laurencekirk has recently been upgraded to cope with the 500 houses being built under the current Local Plan. Site K109 has been identified for 885 houses and 20 Ha employment land. This will require further major upgrades to the water supply to the area as the main that was laid two years ago will not be big enough to support this level of development. It was designed for the 500 or so house units planned at that time. There will certainly be a major upgrade required to Causeywell Service Reservoir.	Laurencekirk WWTW currently has insufficient capacity for new developments. A growth project will be required to allow further development.
Kincardie and Mearns	Laurencekirk	K93	houses	885hu - either in K109 or K93		370097 770686	Whitehillocks WTW	Laurencekirk WWTW		
Kincardie and Mearns	Marywell	K45	Employment			393490 799028	Invercannie and Mannofield WTW	PRIVATE	The pumping station at Marywell will need to be upsized in order to serve the employment land. The size of upgrade required will depend on flows involved. Huge upgrades may be required extend all the way back to Clochandighter Service Reservoir and Redcraigs Pumping Station. A quote has been produced previously for a similar upgrade which came in at approximately £2.6 million.	There is currently to public sewers in Marywell. Private treatment will be required.
Kincardie and Mearns	Marywell	K135	Employment			393860 799477	Invercannie and Mannofield WTW	PRIVATE		

Main Settlements to Consider for Aberdeenshire FIRS

Kincardie and Mearns	Newtonhill	K71	housing	25		390639 793077	Invercarnie and Mannofield WTW	Nigg PFI	By locating a new settlement at Elsick, major upgrades will be required at Clochandighter Service Reservoir, Bluehills Service Reservoir and Redcraigs Pumping Station. A new reservoir may be needed to cope with the demand. Redcraigs Pumping Station would need to be rebuilt, along with the installation of a new pumping main. Completely new infrastructure will need to be laid to cope with the additional flows. This would include 12km of new main. 6km of rising main would be required to Clochandighter Service Reservoir and 6km of distribution main to Elsick. A new pumping station may be required between Mannofield WTW and Bluehill Service Reservoir. The total cost of all these upgrades could be in the region of £10 million.	Nigg PFI will be upgraded for growth as required. A new pumping main may be required from Newtonhill to Nigg PFI.
Kincardie and Mearns	Portlethen	K125	Mixed Use	1550		391371 798585	Invercarnie and Mannofield WTW	Nigg PFI	All preferred sites are to the north of the settlement. Stewart Milne Homes are currently building an 820 hu development at Schoolhill, which also adds to the demands on Scottish Water's assets. Upgrades will be required to Clochandighter Service Reservoir. A new reservoir may be required to cope with the cumulative effect of all the preferred developments. Redcraigs Pumping Station would need to be rebuilt, along with the installation of a new pumping main. Completely new infrastructure will need to be laid to cope with the additional flows, including 6km of new main from Redcraigs Pumping Station to Clochandighter Service Reservoir.	A new pumping main and new pumping station may be required. These upgrades could be tied in with the development proposed at Elsick if the areas are going to be masterplanned. This would help provide a strategic solution, but may require a consortium to be formed as there will be several developments impacting on these assets.
Kincardie and Mearns	Portlethen	K136	Employment			390626 798053	Invercarnie and Mannofield WTW	Nigg PFI		
Kincardie and Mearns	Portlethen	K137	Community			391815 796181	Invercarnie and Mannofield WTW	Nigg PFI		
Kincardie and Mearns	Stonehaven	K73	housing	230		385988 788018	Whitehillocks WTW	Nigg PFI		
Kincardie and Mearns	Stonehaven	K141	Primary School			387474 787116	Glendye WTW	Nigg PFI	The current capacity at Glendye WTW is ok. Some growth may be required to accommodate all the proposed development. In order to reduce the pressure on the inlet main some developments will need to cross the A90 for their off-site mains extension. Site K141 may struggle to get supplied from Megray Service Reservoir as it is approaching the same height level as the tank. A small portion of Stonehaven near Kirkton of Fetteresso is served by Whitehillocks WTW. It is currently ok for capacity.	Stonehaven is pumped to Nigg PFI for treatment. There is currently available capacity at Nigg PFI but there may be limited capacity at the pumping stations. There are no network issues at the north side of Stonehaven. New infrastructure and a pumping main will need to cross A90 for sites K36, K67 and K73. Due to the age of the sewer network there could be minor issues throughout Stonehaven which will need to be addressed by the developers.
Kincardie and Mearns	Stonehaven	K122	housing	200		387516 786815	Glendye WTW	Nigg PFI		
Kincardie and Mearns	Stonehaven	K36	Employment			385472 786921	Whitehillocks WTW	Nigg PFI		
Kincardie and Mearns	Stonehaven	K67	Employment			385688 786947	Whitehillocks WTW	Nigg PFI		
Kincardie and Mearns	Stonehaven	K139	Community			386236 786404	Glendye WTW	Nigg PFI		
Kincardie and Mearns	Stonehaven	K262	Supermarket			386105 786053	Glendye WTW	Nigg PFI		
Kincardie and Mearns	Stonehaven	K44	Cemetery			385348 786114	Whitehillocks WTW	Nigg PFI		
Kincardie and Mearns	Banchory Leggart	K121	mixed use	2425	Employment and new country park	391976 801469	Invercarnie and Mannofield WTW	Nigg PFI	Major upgrades will be needed at Clochandighter Service Reservoir. A new reservoir may be needed to cope with the demand. Redcraigs Pumping Station would need to be rebuilt, along with the installation of a new pumping main. Completely new infrastructure will need to be laid to cope with the additional flows. This will include 4km of trunk main from Clochandighter to Banchory Leggart. A new pumping station may be required between Mannofield WTW and Bluehill Service Reservoir.	There is a trunk sewer at Leggart Terrace. The level of development proposed will have a serious impact on the sewer network. There is development proposed within the City Centre which will drain from the Western district through the Western trunk sewer and from Countesswells through the siphon and they both hit a 1800mm sewer. Banchory Leggart will also hit this pinch point. A Drainage Impact Assessment will be required to assess the requirements. Banchory Leggart will drain straight to Nigg PFI where it is treated.

Main Settlements to Consider for Aberdeenshire FIRS

Marr	Aboyne	52	Residential Housing	2		350856 798874	Tanarside WTW	Aboyne WWTW	Tannarside WTW currently experiences capacity issues within the summer as the springs dry up and water has to be tankered to Aboyne. This situation will deteriorate further with additional development. To allow further development to be accommodated in this area Scottish Water will need to initiate a growth project. Further network investigation may also be required.	Aboyne WWTW currently has limited treatment capacity. Some growth will be required to support all of the proposed development. There is no existing network infrastructure at sites M85, M54 and M52. Some upgrading may be required for parts of the sewer network downstream.
Marr	Aboyne	54	Housing	4		350839 798913	Tanarside WTW	Aboyne WWTW		
Marr	Aboyne	85	Residential and Community	100		351480 799263	Tanarside WTW	Aboyne WWTW		
Marr	Alford	103	Cemetery Extension			357093 816335	Invercannie & Mannofield WTW	Alford WWTW	There is sufficient capacity at Invercannie and Mannofield WTW, however the trunk main which serves Alford is at capacity. Further network investigation will be required and it is likely that Part 3 assets will need to be upgraded. Upgrades have previously been costed in the region of approximately £2 million.	There is currently sufficient capacity at Alford WWTW to serve all of the preferred development. Further investigations could be required to determine whether network upgrades are required.
Marr	Alford	104	Employment		Community facilities including recycling facility	357892 815711	Invercannie & Mannofield WTW	Alford WWTW		
Marr	Alford	131	Housing	80		357223 815830	Invercannie & Mannofield WTW	Alford WWTW		
Marr	Banchory	25	Low cost Housing	5		369935, 797230	Invercannie WTW	Banchory WWTW	There is currently sufficient capacity at Invercannie WTW. Brathens Service Reservoir will serve all the preferred development to the north of the settlement but a dedicated distribution main should be installed to serve the new developments. The capacity of Lairds Cast Pumping Station may need to be assessed.	There is currently sufficient treatment capacity available at Banchory WWTW. However, new network infrastructure will be required for these developments. Upgrades to some of the existing sewers downstream may be required.
Marr	Banchory	45	Mixed Arts, Recreational, and Residential Use	35	Arts & Recreational Uses	372020, 796910	Invercannie WTW	Banchory WWTW		
Marr	Banchory	46	Business, Commercial Land, Heat and Power Plant, New	250		370500, 797430	Invercannie WTW	Banchory WWTW		
Marr	Banchory	82	Residential	10		370090, 796910	Invercannie WTW	Banchory WWTW		
Marr	Banchory	105	Site for Cemetery		At Land at Upper Lochton	369364 797143	Invercannie WTW	Banchory WWTW		
Marr	Huntly	16	Mixed use	5		353830, 839410	Craighead WTW	PRIVATE	Craighead WTW currently has sufficient capacity to serve all the preferred development. Site M71 will need to check network capacity in the trunk main as it is situated at the end of the service. All the other small sites are ok.	There is currently no available capacity at Huntly WWTW. An SR10 project has been raised by Scottish Water. There are no public sewers east of the river so the developments here will need to be pumped across the river to the sewage works. To avoid sites M71, M16 and M17 all having separate pumping station to pump across the river, there could be one at M17 and the rest of the developments could drain north by gravity. For this to work a pumping station would need to be build at site M71 first. Site M33 will need to pump (although it may be able to gravitate) the foul sewer across the road in order to connect to the existing infrastructure. A Drainage Impact Assessment would be needed.
Marr	Huntly	17	Mixed use	25		353745, 839300	Craighead WTW	PRIVATE		
Marr	Huntly	33	Employment		Employment	351662, 840010	Craighead WTW	Huntly WWTW		
Marr	Huntly	34	Employment		Employment	352050, 839145	Craighead WTW	Huntly WWTW		
Marr	Huntly	71	Mixed	270	New primary school	353830, 840570	Craighead WTW	Huntly WWTW		