Outcome: All people in Newry, Mourne and Down benefit from a clean, quality and sustainable environment

Indicator: Level of Quality Environment

The environment where people live is a key component of people's quality of life. The impact of environmental pollutants on health is sizeable, with around one fourth of the global burden of diseases deemed to be associated with poor environmental conditions. But the environment also matters intrinsically when people attach importance to the beauty and the cleanliness of the place where they live.

Measures: Properties impacted by flooding risk

Urban air quality

Fines for litter, dog fouling, noise pollution

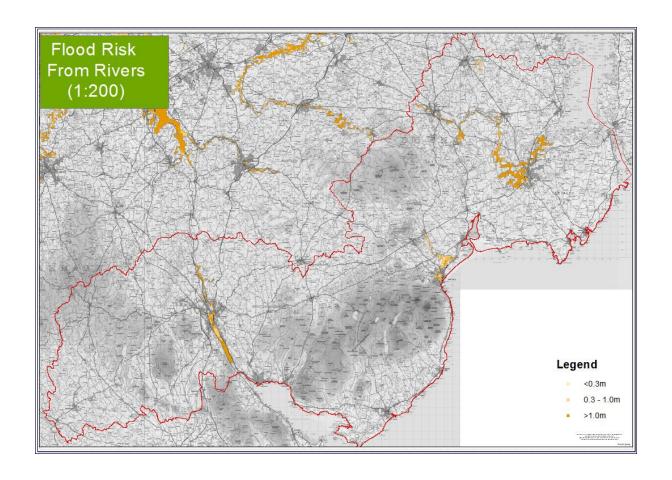
Properties impacted by flooding risk – Rivers Agency Data

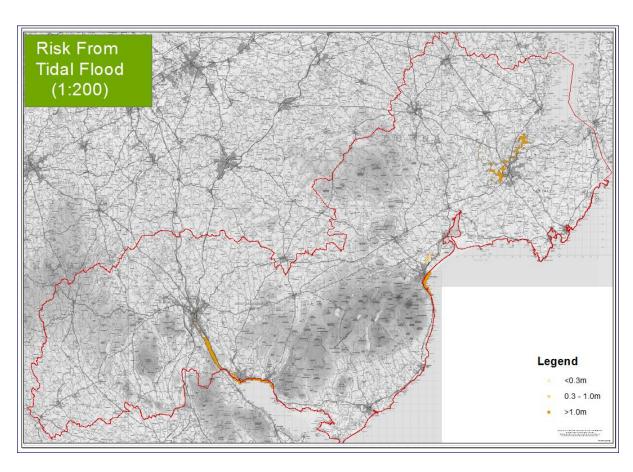
We have put in a data request through LPS NI for data relating to flooding in our area and are awaiting data for analysis. We do however have spatial NI web services and the impact of flooding are displayed in the maps below.

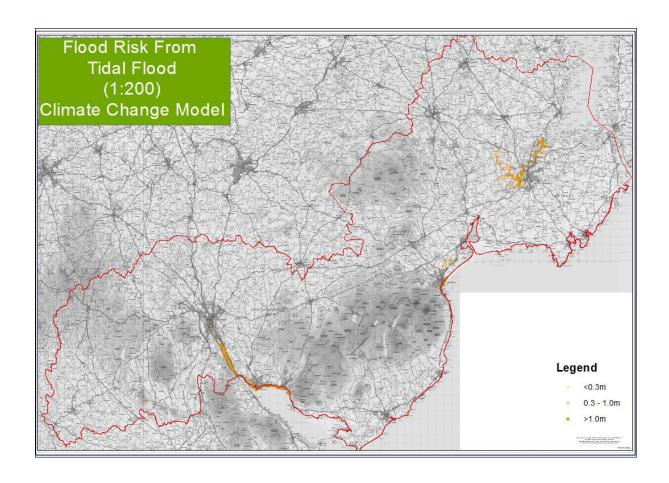
The first map shows land at risk from fluvial flooding highlighted in orange. As historically many of our settlements have developed along our rivers several are at high risk of flooding from a river, in particular in Newry, Newcastle and Downpatrick.

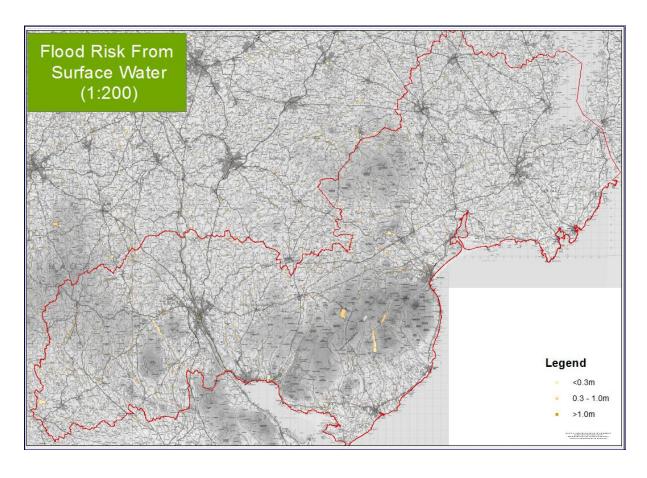
Coastal inundation is also a risk to our area as shown in map 2. Again risk is greatest in Newry and Newcastle, and also in parts of Downpatrick, Warrenpoint and Rostrevor. The effects of climate change also has an impact on tidal flooding (map 3), however this is minimal in built up areas in our district.

Surface water risk is more sporadic across the district however the impact is likely to be less severe than coastal or river flooding.



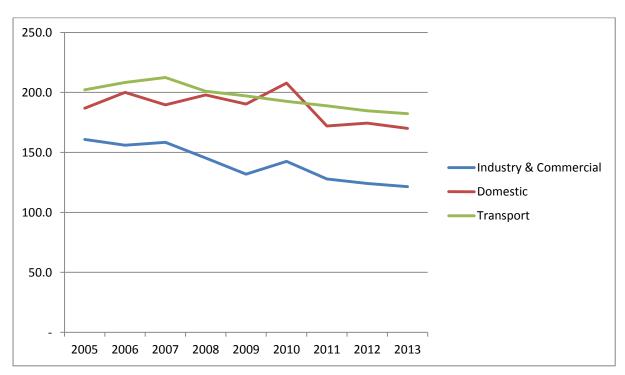




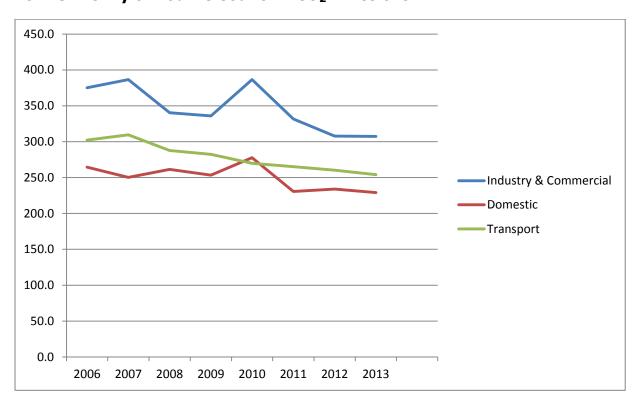


Urban Air Quality - CO₂ Emissions

Former Down Council – CO₂ Emissions



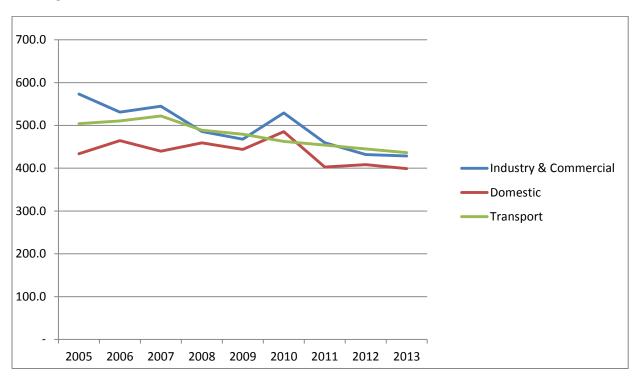
Former Newry & Mourne Council - CO₂ Emissions



We can see from the graphs that the levels and producers of CO_2 emissions vary greatly between the former councils with Down having predominantly transport as its primary CO_2 emitter while in Newry and Mourne the greatest emitter was that of Industry and Commercial.

As expected the levels of CO₂ emissions were much higher in Newry and Mourne than Down however both sets of emissions have declined since 2010 and remained somewhat constant from 2011-2013.

Newry, Mourne and Down - CO₂ Emissions



Newry, Mourne and Down (excluding any data on Ballyward) shows a decreasing CO_2 emissions rate since 2010 which has been remaining steady over the 2011-2013 period. It also shows that transport has overtaken Industry and Commercial as the largest CO_2 emitter since 2011 for the district as a whole.

Urban Air Quality - NO₂ Emissions

NO₂ Diffusion Tube Data 2008-2013

Location	Site Type	Within AQMA?	Data Capture for monitoring period%	Confirm if data has been distance corrected (Y/N)	Annual mean concentration (Local Bias Adjustment factor 0.81 (μg/m3) 2008 2009 2010 2011 2012 2013					
Canal Street (Pub)	Roadside	Y	100	Y	49	61	65	46	82	60
Lower Canal St	Roadside	Υ	100	Y	-	-	57	27	49	38
Catherine Street	Roadside	Υ	100	Y	36	42	52	28	55	41
25 Sandy Street	Roadside	Υ	100	Y	41	49	58	34	59	43
59 Sandy Street	Roadside	Υ	100	Y	56	56	51	34	55	42
Water Street	Roadside	Υ	100	Y	40	46	60	32	55	44
Trevor Hill 1	Roadside	Υ	100	Υ	35	35	44	45	48	37
Trevor Hill 2	Roadside	Υ	100	Y	34	34	43	44	52	40
Trevor Hill 3	Roadside	Υ	100	Y	33	33	45	44	55	44
33 Kilmorey Street	Roadside	Υ	100	Υ	43	32	53	60	65	47
52 Kilmorey Street	Roadside	Υ	100	Y	39	13	48	54	53	43
4 Bridge Street	Roadside	Υ	100	Y	31	38	43	25	42	34
60 Bridge Street	Roadside	Υ	100	Y	-	-	29	17	34	25
Basin View Terrace	Roadside	Y	100	Y	32	41	45	27	48	30
Doran's Hill	Roadside	Υ	100	Y	-	-	29	17	32	23
Dominic/Patrick St	Roadside	Υ	100	Y	29	25	41	22	38	29
Francis Street	Roadside	Υ	100	Υ	32	41	45	27	48	36
Market Office	Urban Background	Υ	100	Y	18	22	24	14	22	19
115 Chapel St	Roadside	Y	100	Y	-	28	34	20	25	18
42 Patrick Street	Roadside	Y	100	Y	35	46	52	31	50	18
Monaghan Row	Urban Background	Υ	100	Y	13	14	16	9	16	13
Pine Grove	Roadside	Υ	100	Y	-	-	37	21	36	26
4 Windsor Hill	Roadside	Υ	100	Υ	26	39	25	25	45	35
9 KilmoreyTerrace	Roadside	Υ	100	Y	-	51	69	37	38	35
2 Chapel Street	Roadside	Y	100	Y	-	28	34	20	35	30
71Kilmorey street	Roadside	Υ	100	Y	-	51	69	37	74	56
Camlough Road 1	Near road	Υ	100	Υ	-	44	45	29	23	19
Camlough Road 2	Near road	Υ	100	Υ	-	43	44	31	26	21
Duke Street Warrenpoint	Roadside	Υ	100	Y	-	-	-	13	23	31
Main Street Camlough	Roadside	N	100	Υ	-	-	-	11	24	19

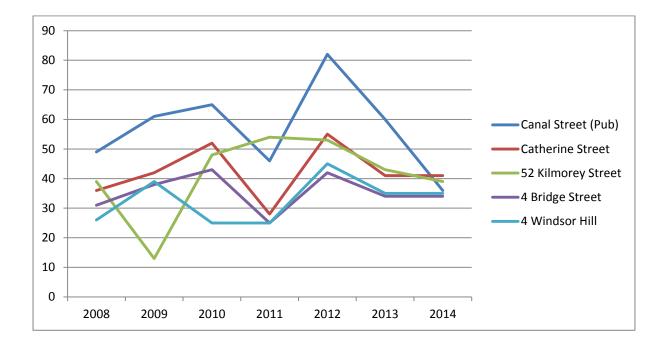
Lower Edward St	Roadside	N	100	Y	-	-	-	18	34	25
Soho Bus Station	Near road	N	100	Υ	-	-	-	18	30	23
Belfast Rd 1 (Glin Court)	Near road	Υ	100	Υ	-	-	-	-	14	24
Main Street Hilltown	Roadside	Υ	100	Υ	-	-	-	-	33	24
Belfast Rd 2 (Downshire Ct))	Roadside	Υ	100	Υ	-	-	-		15	22
Canal St Station	Road side	Υ	50	Υ	-	-	-	-	-	40
63 Canal Street	Roadside	Υ	50	Υ		-	-	-	-	37

NO₂ Diffusion Data – 2014

Location	Site Type	Within AQMA?	Data Capture for monitoring period %	Confirm if data has been distance corrected (Y/N)	Annual mean concentr ation (Bias Adjustm ent factor 2014 = 0.81
Canal Street (Pub)	Roadside	Υ	100	Υ	36
13 Canal St	Roadside	Υ	100	Υ	58
Catherine Street	Roadside	Υ	100	Υ	41
25 Sandy Street	Roadside	Υ	100	Υ	41
59 Sandy Street	Roadside	Υ	100	Υ	52
Water Street	Roadside	Υ	100	Υ	42
Trevor Hill 1, 2, 3	Roadside	Y	100	Υ	39
33 Kilmorey Street	Roadside	Y	100	Υ	49
52 Kilmorey Street	Roadside	Υ	100	Υ	39
115 Chapel St	Roadside	Υ	100	Υ	19
4 Bridge Street	Roadside	Υ	100	Υ	34
60 Bridge Street	Roadside	Υ	100	Υ	27
Basin View Terrace	Roadside	Υ	100	Υ	33
Doran's Hill	Roadside	Υ	100	Υ	24
Dominic/Patrick St	Roadside	Y	100	Υ	28
Francis Street	Roadside	Υ	100	Υ	34
Market Office	Urban Background	Υ	100	Υ	23
4 Patrick Street	Roadside	Υ	100	Υ	40
Monaghan Row	Urban Background	Υ	100	Υ	12
Pine Grove	Roadside	Υ	100	Υ	28
4 Windsor Hill	Roadside	Y	100	Υ	35
9 Kilmorey Terrace	Roadside	Υ	100	Υ	29
2 Chapel Street	Roadside	Υ	100	Υ	30
71 Kilmorey Street	Roadside	Υ	100	Υ	51
Duke St, Warrenpoint	Roadside	N	100	N	29
Lower Edward St	Roadside	Υ	100	Υ	24
Soho Bus Station	Near road	Υ	92	Υ	24

Belfast Rd 1 (Glen Ri)	Roadside	Υ	100	Υ	28
Belfast Rd 2 (Down Ct)	Roadside	Υ	100	Υ	22
Canal St Station	Roadside	Υ	100	Υ	42
63 Canal St	Roadside	Υ	100	Υ	45
Kilmorey St 4	Roadside	Υ	58	Υ	27
Kilmorey St 5	Roadside	Υ	58	Υ	30

The diffusion tube locations have changed slightly between 2013 and 2014 hence why there are two separate tables but we have chosen those locations that have data from 2008 to 2014 to show a sample of the NO_2 emissions that have been occurring in our district during this period.

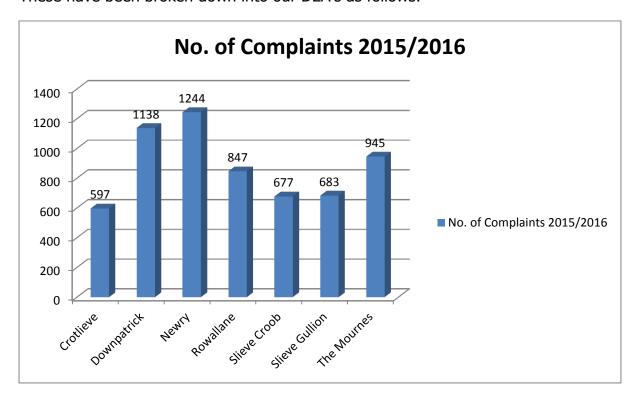


The graph above shows that NO2 emissions have been fluctuating frequently between 2008 and 2014 with peaks in almost all locations in 2012 followed by a sharp decrease. Many of the locations are showing steady NO2 emissions between 2013 and 2014.

Fines for litter, dog fouling, noise pollution – Environmental Complaints

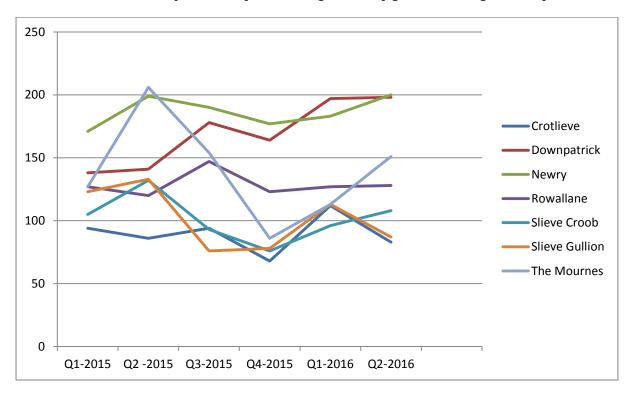
There were a total of 6612 environmental complaints logged between 2015/2016 across the NMDDC area.

These have been broken down into our DEA's as follows:



We can see that Newry DEA had the highest number of environmental complaints with Crotlieve experiencing the lowest. (It must be mentioned that there are a number of complaints that were recorded but no location put beside them hence why the DEA figures do not total the overall NMDDC figure)

Environmental Complaints by DEA & Quarter (Q1 2015 – Q2 2016)

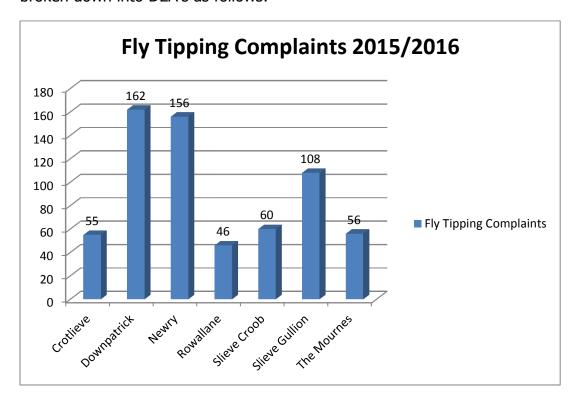


We can see from the graph that the levels of environmental complaints fluctuate greatly across the DEA's and quarters however 5 of the 7DEA's have experienced an increase (albeit very small in some cases) between Q1 2016 and Q2 2016.

The following few graphs looks at specific environmental complaints such as Fly Tipping and dog issues to see what trends are there for our DEA's and wards.

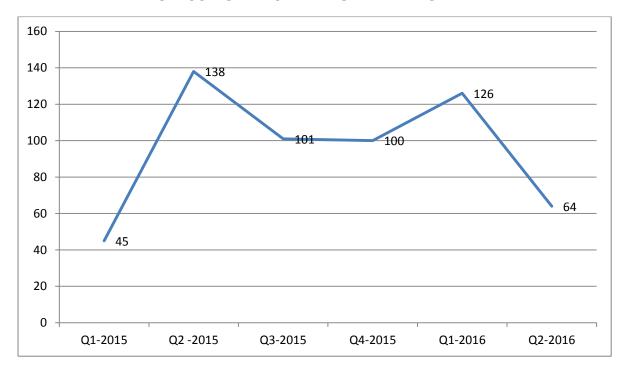
1. Fly Tipping:

Fly tipping is the dumping of waste illegally and is a serious issue across our district. There were a total of 666 fly tipping complaints from Q1 2015 - Q3 2016 and are broken down into DEA's as follows:



We can see that our two urban areas have much higher levels of fly-tipping complaints then the more rural DEA's although Slieve Gullion still recorded over 100 complaints during this period.

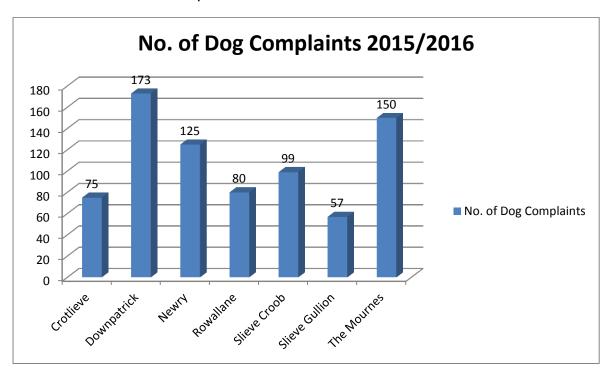
NMDDC – Total Fly-Tipping Complaints Q1 2015 – Q2 2016



We can see that the level of fly tipping complaints has peaked twice over the 6 quarters being analysed and has experienced a significant decline between Q1 2016 and Q2 2016.

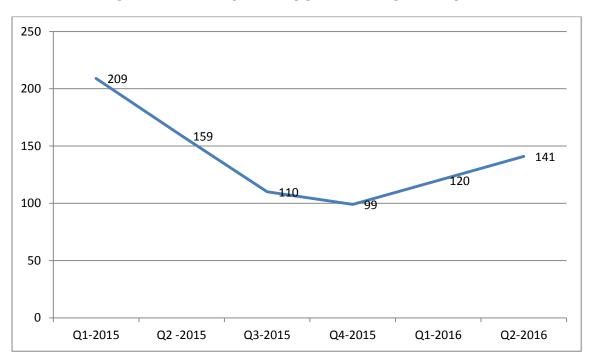
2. Dog Related Complaints

Between 2015/16 there were a total of 936 dog related complaints. The chart below shows the number of complaints at DEA level across the district.



We can see that Downpatrick and The Mournes had the highest number of dog related complaints during this time with Slieve Gullion recording the lowest.

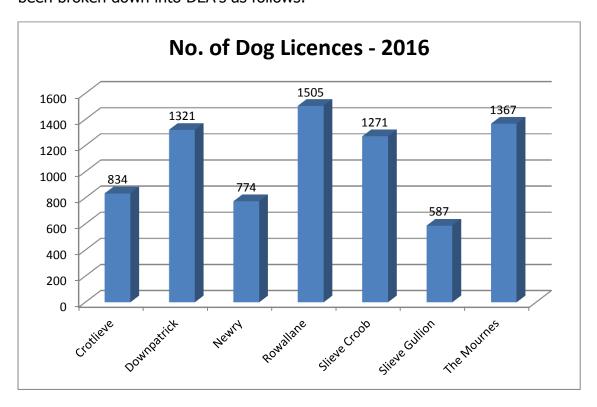
NMDDC - Dog Related Complaints (Q1 2015 - Q2 2016)



We can see from the graph above that NMDDC had a peak of dog related complaints in Q1 2015 which has steadily declined over the following 3 quarters only to increase again in the first two quarters of this year.

Dog Licences

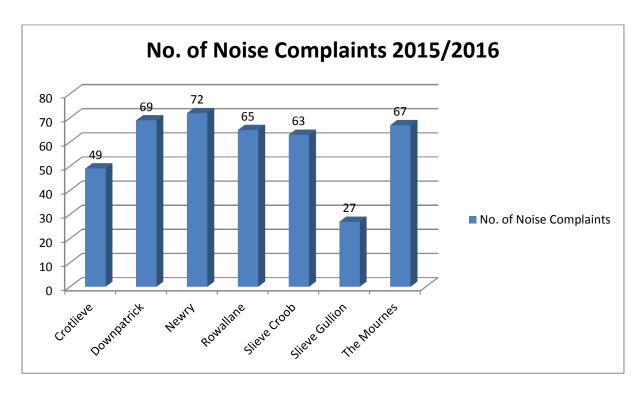
As a subset of the dog related complaints, the data on the number of dog licences issued since the start of 2016 in NMDDC was also analysed. It showed that from Q1 2016 to Q3 2016 there were 7,659 dog licences issued across the district. This has been broken down into DEA's as follows:



When you compare this data to the dog related complaints we see that although Newry had the third highest number of dog related complaints it has the second lowest number of issued dog licences.

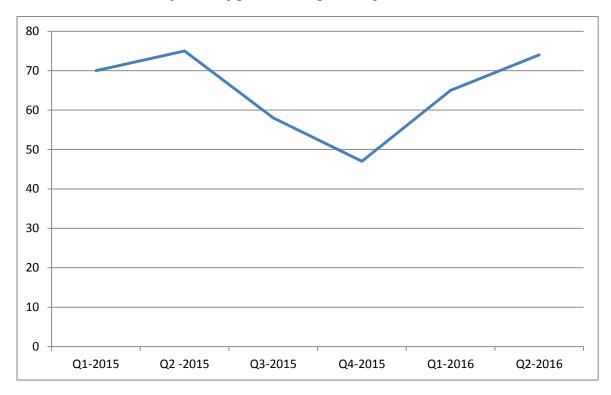
3. Noise Complaints

There were a total of 435 noise complaints recorded across the district between 2015/2016 (not including noise from dogs which was already included under dog related complaints). These were broken down into DEA's as follows:



The chart tells us that Newry had the highest number of noise complaints while Slieve Gullion had the lowest.

NMDDC - Noise Complaints (Q1 2015 - Q2 2016)



The graph shows that there was a decline in noise complaints between Q2 2015 and Q4 2015 however a successive increase has occurred over the first two quarters of 2016.

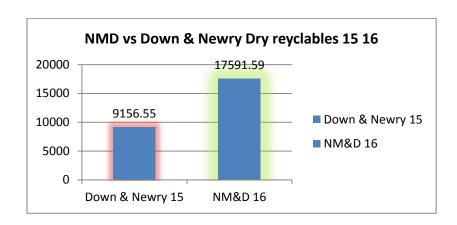
Refuse and Recycling Rates - NMDDC Landfilling and Recycling Data

The table below shows how Newry Mourne and Down Council compare to the old Down and Newry and Mourne Councils with regards to landfill, recycling and refused derived fuel tonnages from 2015 to 2016. (Source WDF 15 16)

Waste	NM&D 16	Down & Newry 15	
Dry Recyclables	17591.59	9156.55	
Green Waste/Food Waste	11944.21	10604.26	
Landfilled	24972.91	40149.74	
CA sites Recycled	10915.53	8861.54	
Bring Site Recycling	777.97	770.89	
RDF	21071.7	3254.42	

Recycling - Dry Recyclables

From the table above we can see that the new council of Newry Mourne & Down Council is excelling on producing more recyclables compared to Newry and Down council as two separate entities. In 2015 Newry Council and Down Council produced 9156.55 Tonnes of dry recyclables compared to Newry Mourne and Down Council producing 17591.59 tonnes an increase of just over 8 thousand tonnes this can also be seen in the line graph below that a upward curve for recycling is great for our district and we hope to continue this trend year on year going forward.



Recycling - Green Waste/Food Waste

Green waste/food waste can be seen on the table above to also be on the increase with Newry Mourne & Down Council producing 11944.21 tonnes of mixed garden and food waste compared to the old Newry Council and Down Council producing a combined total of 10604.26 tonnes so there was an increase of nearly 1400 tonnes from the councils merging. Newry Mourne & Down council also plan to roll out brown bins to another 21000 homes in early 2017 which will again increase the recycling rates with regards to Green and Food waste in the District.

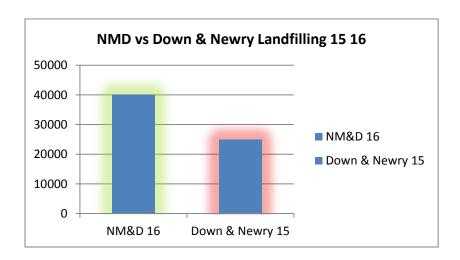
Landfilling

Landfilling has seen a drastic drop since the merger of the two former councils. Newry Mourne and Down council landfilled a total of 24972.91 Tonnes last year 15/16, compared to the old Newry and Mourne and Down councils landfilling a total of 40149.74 tonnes. Newry Mourne and Down Councils waste to landfill decreased just over 15000 tonnes. This decrease was largely down to Newry and Mourne Councils landfill site at aughnagunn closing in early march 2015 and there new waste contract starting in April 15 with REGEN so that their previously landfilled waste was now going to a Dirty Material Recovery Facility which is a where waste is broken down into more recycling rather than directly landfilling everything.

Next year we will hope to see the landfilling again decreasing with the new council, as the previous Down council has now also began their Dirty MRF waste contract with REGEN and the closure of the landfill site at Drumnakelly in May 16. Now that all Newry Mourne and Down Councils waste is being treated at a Dirty Material Recovery Facility we expect landfilling to decrease even further

With the introduction of the brown bin being rolled out across the whole district early next year we should have an additional 21000 homes whose food waste will no longer be going into the black bins and rather into the brown which should bring down landfilling tonnages.

From the chart below we can see that landfilling has decreased significantly which is good for Newry Mourne and Down District as it is helping us live in a cleaner more environmentally friendly environment.



Recycling - Civic Amenity Sites

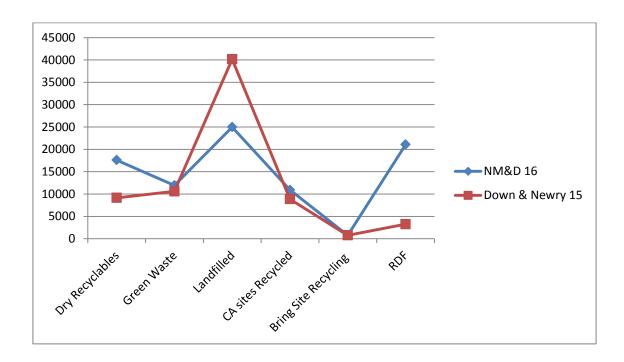
Civic Amenity sites tonnages for recycling has also increased in the new council compared to its predecessor councils of Newry and Down. Newry Mourne and Down Council recycled 10915.53 tonnes in 15/16 with Newry and Down councils only recycling 8861.54 tonnes in 14/15, showing an increase of just over 2000 tonnes in recycling.

The council's recycling rate is expected to increase again next year sites next year as the council is hoping to locate a bigger new Civic Amenity site in Downpatrick which would hold more waste streams. Newry Mourne and Down Council operate 10 Civic amenity sites in the district 7 in the former Newry and Mourne side and 3 in the former Down side.

Recycling - Bring Sites

Bring site recycling figures from 2015 to 2016 show a slight increase of just over 7 tonnes since the establishment of the new Newry, Mourne and Down Council. Newry Mourne and Down recycling tonnage for 2016 was 777.97 tonnes whilst the old Newry and Down Council collected a total of 770.8 Tonnes.

The graph below shows all the landfill and recycling rates for 2015 and 2016. We can see that in the past year our recycling rates have increased compared to the combined rates of the two former councils in 2015. The graph also shows the significant decrease in landfilling over the past year, trends we would like to see continue in the future.



Refuse and Recycling Rates - Blue bin weight as a percentage of black bin weight, per ward.

Blue Bin Weight as a percentage of Black Bin Weight Per Ward -					
September 2016					
ANNALONG	30.55%				
BINNIAN	33.49%				
TOLLYMORE	34.34%				
LISNACREE	35.63%				
NEWTOWNHAMILTON	39.87%				
KILKEEL	42.02%				
MULLAGHBANE	45.03%				
CROSSMAGLEN	45.25%				
MAYOBRIDGE	45.77%				
WHITECROSS	48.50%				
HILLTOWN	51.77%				
CAMLOUGH	53.01%				
FATHOM	56.86%				
DAMOLLY	57.43%				
FORKHILL	59.40%				
DERRYLECKAGH	64.27%				
BALLYBOT	65.64%				
BESSBROOK	66.34%				
ABBEY	67.57%				
DRUMALANE	72.18%				
ST. PATRICK'S	73.32%				
WARRENPOINT	75.72%				
ROSTREVOR	80.72%				
BURREN	83.80%				
Average	57.70%				

The table above provides a snapshot of the recycling rates in each ward based on data for September 2016. It shows significant variations in recycling rates across our district with very high levels in Rostrevor and Burren with much lower levels in Annalong and Binnian.