



Cheshire East Scrutiny

March 2023

Introductions

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Flood Risk Management Responsibilities

Flood & Water Management Act 2010: We all have a duty to co-operate

Lead Local
Flood Authority

Public body

Highway
Authorities

Water and
sewerage companies

Riparian
Owners



Developing, maintaining and applying a strategy for local flood risk management

Managing the risk of flooding from surface water, groundwater and ordinary watercourses

Responsible for taking a strategic overview of all sources of flooding

Managing the risk of flooding from main rivers and the sea

Regulating reservoir safety

lead responsibility for providing and managing highway drainage and roadside ditches

co-operate with the other RMA's to ensure their flood management activities are well coordinated

Managing the risk of flooding from wastewater and water infrastructure

Work with developers, landowners and LLFAs to understand and manage risks

Maintain the watercourse within the boundary of their land so it freely flows and has no obstructions

United Utilities: Wastewater Services



UU is essentially split into two operating areas; water and wastewater



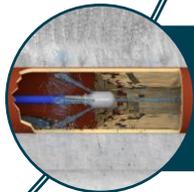
From sewers to treatment works, we operate, maintain and manage an extensive range of assets



This includes over 79,000km of sewers, over 2,700 pumping stations and 567 WwTW



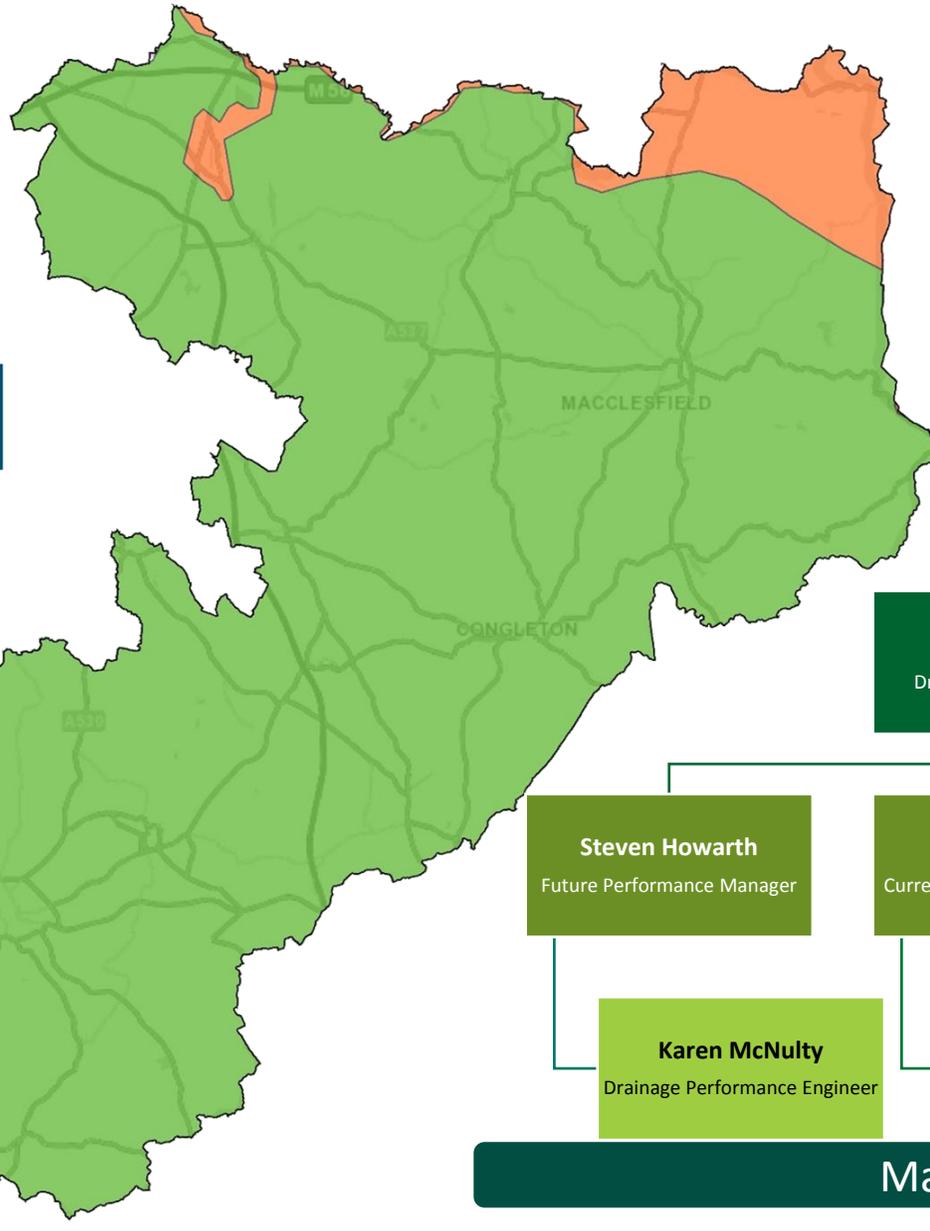
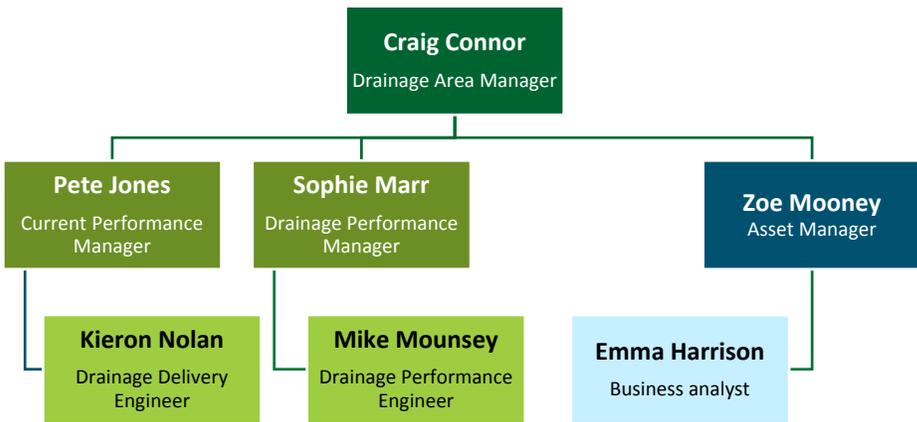
In response, we have 68 Resolution Units and 13 van packs ready to be deployed across the regional wastewater network operational area, 7 days a week, 365 days a year. This helps us respond to operational issues in a timely manner and support our partners



Within Cheshire East's area, UU cleanses over 77,000m of sewer every year.

How we work - Drainage areas

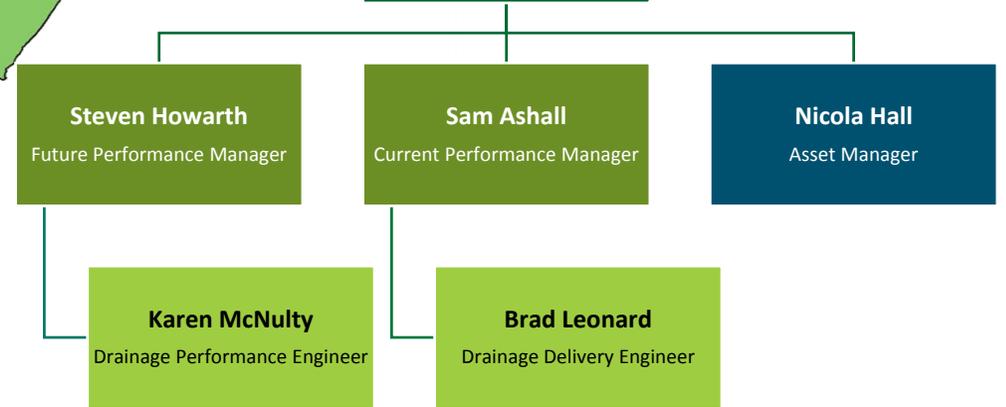
Cheshire



Legend

-  Manchester Drainage Area
-  Cheshire Drainage Area

Manchester



Wastewater Sewer Network

Foul Sewers

Foul sewers carry used wastewater to a sewage works for treatment



Surface Water Sewers

Surface water sewers carry uncontaminated rainwater directly to a local river or stream.



Combined Sewers

CSOs act as a pressure relief valve when there is too much rainfall, allowing rain water, mixed with sewage, to rise inside the sewer and eventually enter a separate pipe which flows into a river or the sea. Sewers operate this way to help prevent the flooding of streets, homes and businesses



How we manage the network

Dynamic Network Management (DNM)

Our goal is to create a smarter network, that enables us to truly understand how our drainage systems perform. We want to be proactive, identifying and responding to pinch points before they become problems experienced by customers. The key to achieving this is through Dynamic Network Management.

We are installing sensors around our network that will monitor levels and learn how that level changes in response to different factors. It will spot deviations to these levels and flag it to our integrated control centre for investigation and resolution before our customers know anything has happened.

To date, over **16,000** sensors have now been installed across the 64 'hot spot' areas which is **c. quarter** of the way through the total programme of installations – *we are over 90% of the way through our programme.*

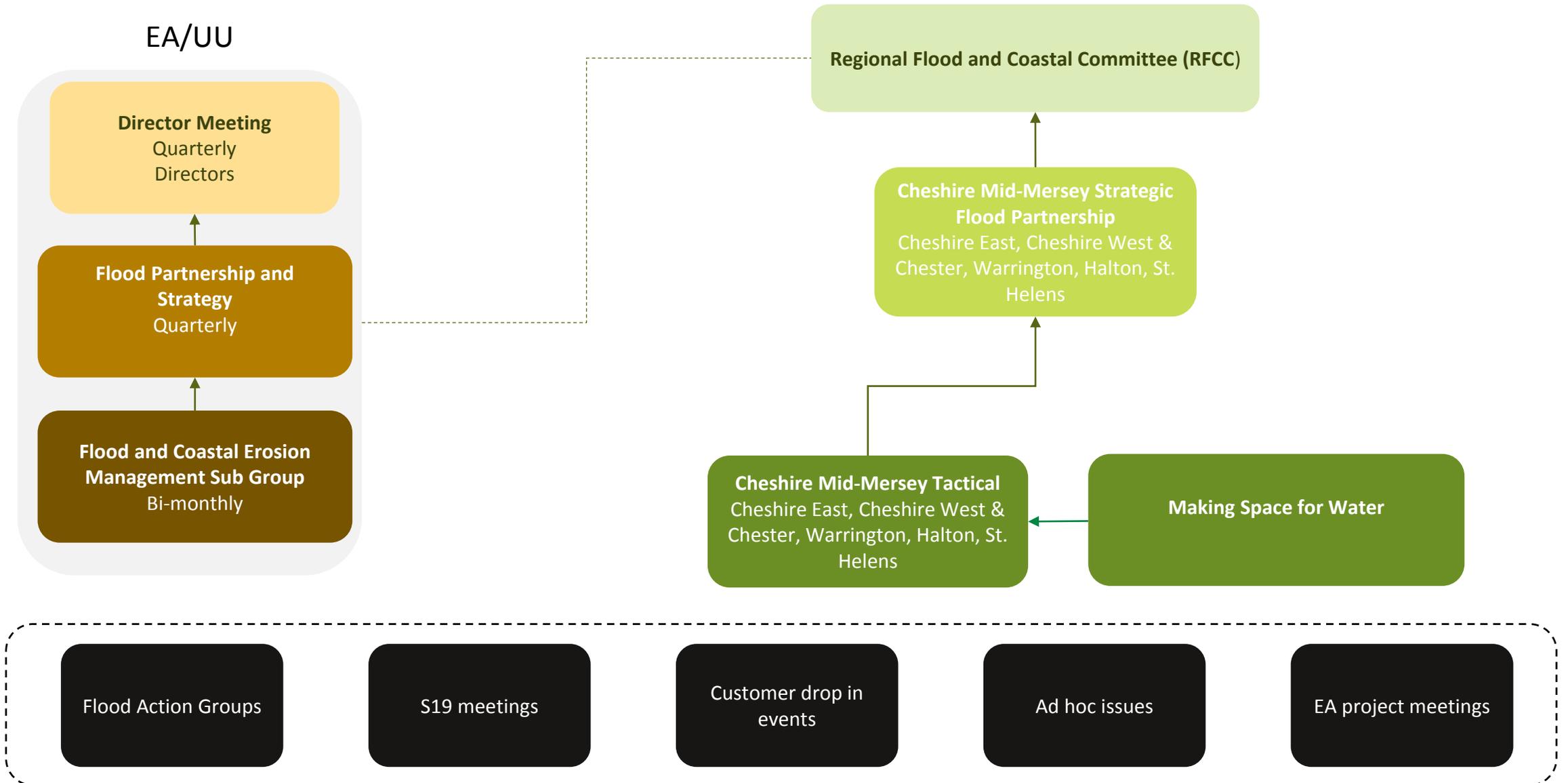
We have an established **Alert Response Team** that are trained and out and about responding to any alerts that come into the Model Office.



In Cheshire East, we have installed 699 monitors, a further 1,200 monitors are proposed to be installed by the end of the programme

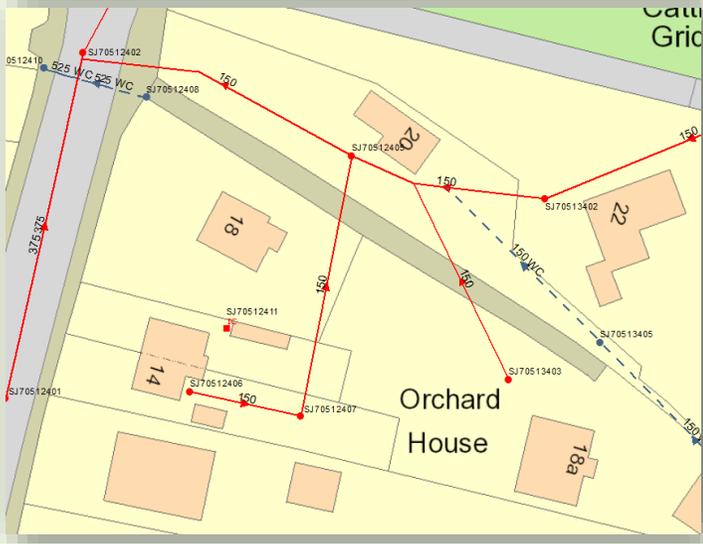
Working with Cheshire East

Meeting in Partnership



Working Together: Watercourses

Watercourses are the source of the majority of partner flooding issues in Cheshire East



Crewe Road, Shavington

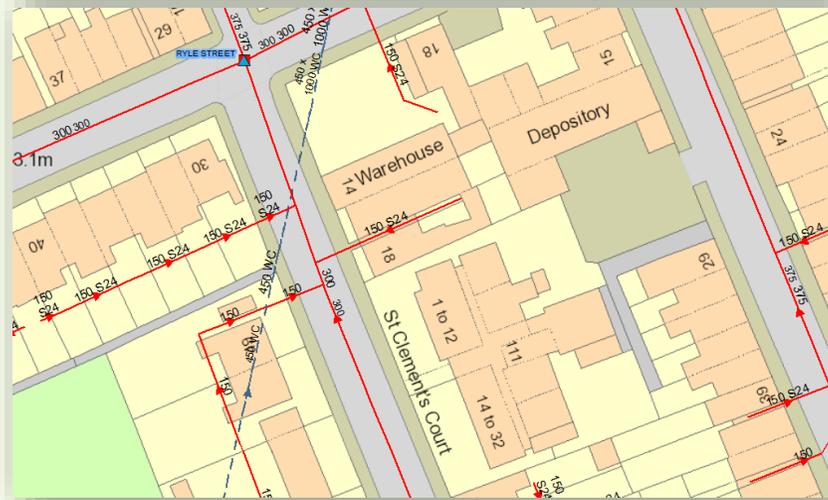
Issue raised to CE in 2016

Culverted watercourse connected into Combined Sewer.

The sewer is not designed to accept watercourses, surcharge occurs out of the manhole causing flooding to four properties.

Need CE to enforce the removal of connection and reinstate to the culvert further downstream.

The customer referred to the Ombudsman and a formal report has been written which CE & UU have been working through. MP involvement and several escalated customer complaints.



Hobson St. / Ryle St.

Worked with CE since June 2018

Culverted watercourse collapsed on Ryle St.

This was left unresolved due to ownership issues. Exfiltration caused a secondary culvert collapse on Hobson St in Feb 2020. This was underneath the highway exposing the combined sewer and causing the watercourse to enter the combined system.

Now a permanent connection has been made by CE between the culvert and UU combined sewer. UU have incurred extensive costs as a result which we had agreed to recharge CE in line with CE recharge approach. The collapsed culvert remains with further risk to UU assets and regular customer complaints.

Poynton

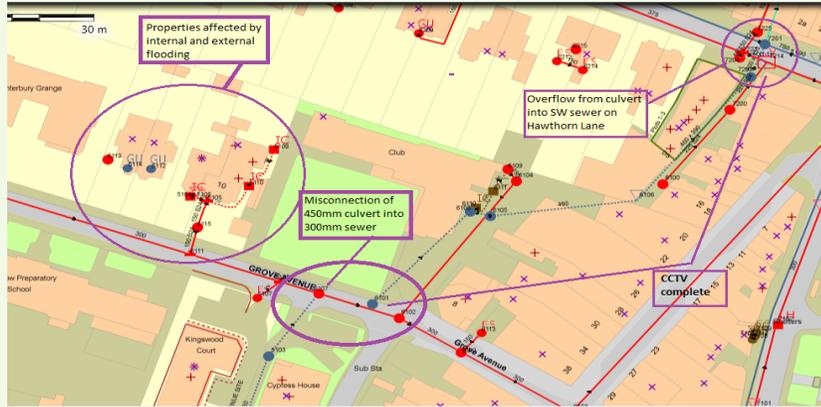
We work very well with Cheshire East in Poynton as this is a common and large scale issue for both parties.

We have installed DNM sensors to monitor inundation to the drainage network, third party and our own.

We have examples of where we have worked together to achieve SW separation and we will continue these discussion in our regular operational meetings.

There is more to be done as a partnership with SW management in this area. We will continue to support these investigations with the EA and CE.

Working Together: Watercourses Continued



Grove Avenue, Wilmslow

Working with CE since 2016

Culverted watercourse has been severed and diverted into the public combined sewer.

There have been internal flooding incidents to a number of nearby properties and the threat of potential internal flooding to Wilmslow Prep School.

Downstream of this misconnection there is a storm overflow. The additional surface water flows passing through from the culvert posing a greater risk of unnecessary pollution to the River Bollin.

UU agreed to CCTV culvert on behalf of CE to confirm it is viable to reconnect. CE was then to reconnect. UU completed in 2017.

CCTV was sent at the time but CE have requested more copies. At the most recent Operational Meeting (03.03.23) It was discussed with CE that they will need to resurvey the culvert themselves as the CCTV will be long out of date and the condition may well have worsened considerably.



Calveley

Worked with CE since 2015

Culvert running under the cheese factory blocked.

This causes higher levels in the watercourse which locks UU's outfall and floods a customers property.

CE and UU have jointly met the customer, local MP and factory on several occasions.

Need CE enforcement on riparian owner to CCTV and clean the culvert. They have attempted but with limited success. CE are still reluctant to enforce the cleaning here and the position remains the same.

Where Needs Improvement?

Cheshire East can obtain GiA and Levey funding to carry out such works. However, the more properties protected, the more cost beneficial. Each of the cases demonstrated here are minimal properties, therefore funding via these mechanisms is unlikely.

For UU, the number of properties does not matter, we prioritise on incidents. Each of these issues costs UU a significant amount every year. The timescales for CE to resolve these issues is unacceptable as is the financial and resource burden on UU.

We would like to see the LLFA receive more internal funding dedicated to resolving flood risk issues, especially when there are partner contributions. The flooding experienced by these residents is severe.

We would like to see CE LLFA:

- Utilise their enforcement powers
- Improve their timescales for resolving issues
- Receive more internal support

Despite consistent communications from a strategic and partnership perspective, better communication between CE and UU is needed when dealing with reactive incidents. That is for both the LLFA and Highways teams.

There are outstanding charges that UU have incurred as a result of issues which are the responsibility of Cheshire East. We need to work to resolve how we can work better as partners.

