

**PR24 Cost Assessment Working Group  
Growth expenditure**

**Draft for discussion**

12<sup>th</sup> October 2021



# Agenda

- (1) Welcome and housekeeping (11:00 to 11:05)
- (2) Background on PR19 growth cost assessment and looking ahead, Ofwat (11:05 to 11:25)
- (3) Growth cost assessment at PR24, Anglian Water (11:25 to 11:50)  
Breakout session (11:50 to 12:30)  
Group reflections (12:30 to 12:40)
- (4) Nutrient neutrality, Ofwat (12:40 to 12:50)
- (5) Closing remarks (12:50 to 13:00)





PR19 background, Ofwat

## Growth expenditure at PR19

Growth expenditure relates to costs driven by population growth, such as the laying of onsite connection and offsite reinforcement assets. At PR19, we referred to growth expenditure including two wastewater lines which reflected wider growth-related costs.

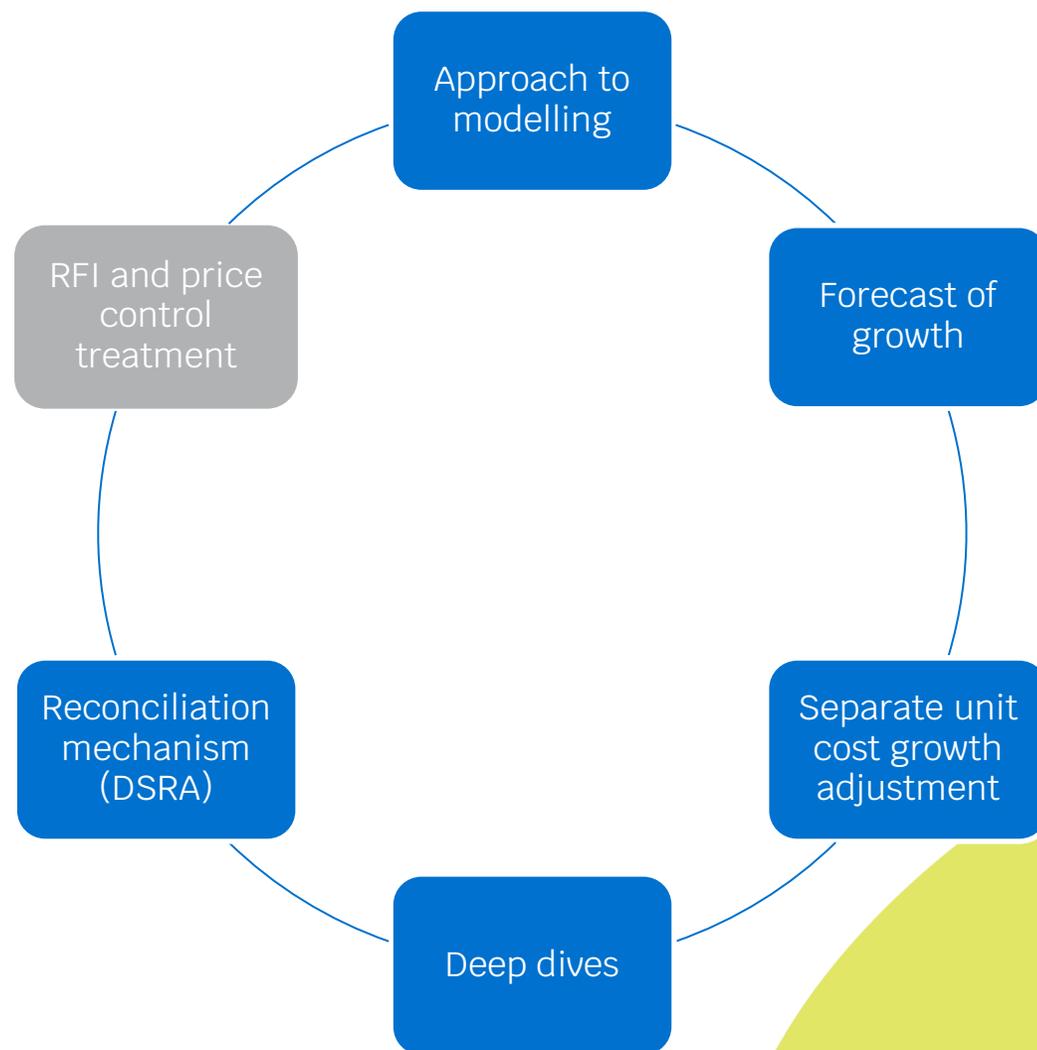
Activity – wholesale water	Description
New connections	Expenditure on local network assets associated with new developments in water services (communication pipe, stop tap valve etc.).
New developments	Expenditure for local distribution assets to provide a water service to new customers.

Activity – wholesale wastewater	Description
New development and growth	Expenditure for the provision of new development and growth in sewerage services.
Growth at sewage treatment works (STWs)	Expenditure to meet or offset changes in demand from new and existing customers at sewage treatment works.
Reduce flooding risk for properties	Expenditure for enhancing the sewerage system to reduce the risk to properties and external areas of flooding from sewers.

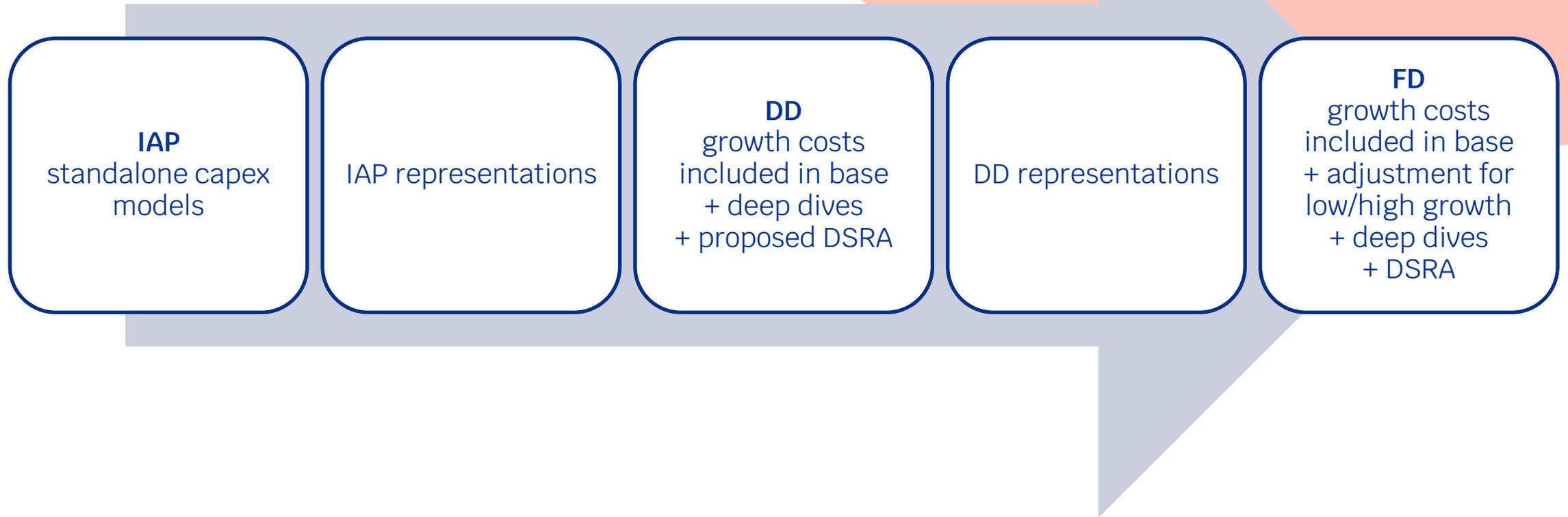
Wider growth-related activities



# Elements of approach to assessing growth expenditure



# PR19 approach evolution to assessing growth expenditure



## Modelling approach – standalone models vs base

### IAP

- **Standalone growth capex models as a function of the number of new connections.**
- Water: unit cost models.
- Wastewater: random effects models with expenditure and number of new connections smoothed over 3 years.
- 50% weight applied to historical model and 50% weight to forecast model.

### DD

- In response to the IAP, companies raised a **number of issues with the growth standalone models**, including that it is inappropriate to assess capital expenditure alone and the wide range of unit costs.
- Alternatives considered: standalone totex models and inclusion of growth in base.
- We considered the **inclusion of growth into base** better addressed companies' concerns and the models remained robust. Growth is routine and can be explained by similar drivers to base (eg scale and density). Approach also mitigated allocation issues (eg historical growth reported under opex, interaction with capital maintenance).
- We carried out **additional deep dives** where gap between the company's forecast of growth costs and ours was large.
- We also **proposed to introduce the developer services revenue adjustment mechanism (DSRA)** to adjust allowed revenue based on the actual number of new connected properties.

### FD

- Most companies agreed sensible and pragmatic approach or did not comment. But some companies commented that (i) not all growth is routine; (ii) base models do not include specific driver for growth and therefore do not capture differences in growth rates, resulting in unfair redistribution of expenditure from higher to low growth companies.
- We retained **growth in base**. Developer services data request did not enable better separate models.
- **Separate growth unit adjustment** depending on whether the company operates in forecast high/low growth area. Applied a 50% cut to negative adjustments.
- Additional deep dives where companies provided additional information (ANH, NES, SRN, SWB, WSX, YKY, SEW).
- The **DSRA was implemented** given that most companies either supported our proposed approach or did not object to it.



# Forecast of new connected properties

IAP

**Linear trend method** to forecast connected properties.

DD

In their response to the initial assessment of plans, some companies suggested the linear method was inappropriate for companies that grow at a faster rate in AMP7 than the historical period, as it would reward those that grow at a slower rate. Some companies suggested using external sources, such as Office of National Statistics (ONS) projections, would be more appropriate and would be consistent with the approach we used to forecast weighted average density.

We took on board companies' feedback and developed our **connected properties forecasts based on household growth rate projections produced by the ONS**.

FD

In response to the draft determinations, a number of companies considered that ONS projections of household growth were too low and would not reflect the most up-to-date information. They suggested Ofwat should use companies' projections based on Local Authority planning, which have been agreed with Defra, the EA and Ofwat through the WRMP process.

We **maintained the use of ONS household projections**. We considered that ONS forecasts are more appropriate to set an efficient allowance and not expose customers to undue risk over a five-year regulatory period, compared to Local Authority forecasts which are used for long-term supply-demand balance planning and therefore tend to be at the upper end of the range of possible growth rates.

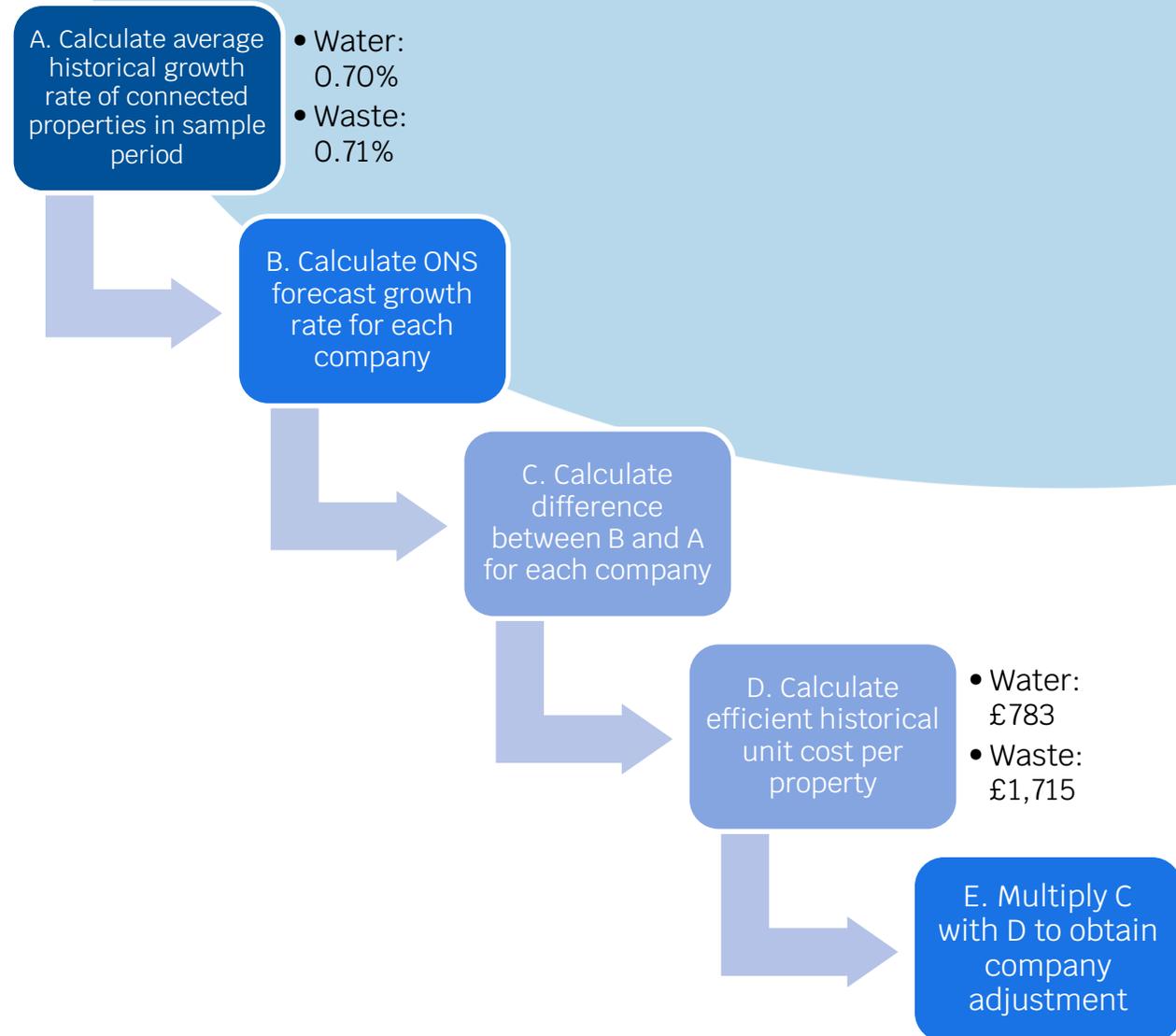
We considered that companies are also largely protected through the DSRA should the number of new connections turns out to be higher than our forecast.

# Separate growth unit adjustment

In response to the draft determination, companies argued that the base models do not include specific cost drivers for growth and therefore do not capture differences in growth related costs between companies with high and low growth rates, resulting in an unfair redistribution of expenditure from companies with a higher growth rate towards companies with a lower growth rate.

We accepted that the integrated models may suffer from missing growth variables and that may lead to the base econometric models only funding the average historical growth rate across the industry.

We therefore **made an adjustment to our base cost allowance depending on whether the company operates in an area with a relatively high or low forecast of population growth, relative to the historical average for the sector**. We took a conservative view of downward adjustments by applying a fifty percent cut to our estimated negative adjustments.



## The DSRA – how it works

The DSRA is an **end-of-period reconciliation mechanism** which adjusts allowed revenue based on the difference between outturn and forecast new connected properties at PR19. It will retrospectively adjust allowed revenue in PR24 if outturn growth is more or less than our forecast growth for each company, using company-specific unit rates.

The purpose of the DSRA is to **encourage timely and quality new connections**, by adjusting developer services revenue within the total revenue control.

The DSRA applies for water and wastewater network plus controls, and for each company it works as follows:

$$\text{DSRA} = \sum_{t=1}^5 (\text{AC}_t - \text{FC}_t) \times \text{Unit Rate}_t$$

Where AC is the number of outturn new connected properties, FC is our forecast of new connected properties at PR19, t is each charging year and the unit rate was set by Ofwat at PR19.

Unit rate: we applied a single unit rate calculated using company forecasts' of gross developer services revenue (site specific developer services work and network reinforcement) and new connected properties. The base cost efficiency challenge was applied for consistency with our cost assessment. Although a single company specific unit rate is relatively simple, it does ensure a degree of cost reflectivity and reflects companies' mix of developments, self-lay penetration etc.



## CMA final determination (I)

- Areas scrutinised during the appeals process were the:
  - **inclusion of growth expenditure in the base models;**
  - **use of ONS data to forecast connected properties;**
  - **separate unit cost adjustment for high/low growth areas;**
  - **Anglian Water's growth cost adjustment claim;** and
  - **true-up mechanism (DSRA).**
- The CMA **substantially agreed with our PR19 approach** to assessing growth expenditure.
- Minor changes were applied to the:
  - **Growth adjustment** - 100% downward adjustment
  - **DSRA** - expanded to reflect the same categories of expenditure included in the growth adjustment.

## CMA final determination (II)

- “[...] we are **concerned about inconsistencies in the reporting of growth costs** between opex and capex expenditure, and the allocation of costs between growth expenditure and capital maintenance. These reporting inconsistencies could distort the results of stand-alone growth models.” (4.758)
- “We decide to use Ofwat’s base cost models which are integrated with growth costs and the four steps [...], because no superior approaches were suggested to us and we have not found any better alternatives. In our view, **the integrated models and the four steps are a pragmatic approach** for estimating growth expenditure in the context of the data problems referred to in the preceding paragraph.” (4.759)
- “We agree with Ofwat that **growth costs are a routine cost incurred by the companies and growth costs will be related to the cost drivers included in the base cost models.**” (4.759)
- “We **decide that we should use the ONS 2018-based forecasts** for three main reasons: [...] companies’ forecasts overestimated growth rates; [...] the ONS 2016-based and 2018-based forecasts are similar to the actual historical figures for all the Disputing Companies; [...] [a]ny deep dives into companies’ growth forecasts would be impractical due to the degree of information asymmetry and unjustified when a suitable independent forecast is available and a true-up mechanism is used.” (4.804)

# CMA final determination (III) – DSRA – changes in scope

## PR19 approach

### Wholesale Water

New connections

New developments  
(incl. network  
reinforcement)

### Wholesale Wastewater

New developments  
and growth (incl.  
network  
reinforcement)

Growth at STWs

Reducing sewer  
flooding risk

We did not include broader growth-related costs in the DSRA as this would not better achieve the objective of encouraging timely and quality new connections, since these costs are not covered by developer charges.

Wider growth-related costs are also covered by cost sharing arrangements.

## CMA approach

### Wholesale Water

New connections

New developments  
(incl. network  
reinforcement)

### Wholesale Wastewater

New developments  
and growth (incl.  
network  
reinforcement)

Growth at STWs

Reducing sewer  
flooding risk

The CMA expanded the scope of the DSRA to cover total growth costs (i.e. including growth at STWs and risk of sewer flooding).





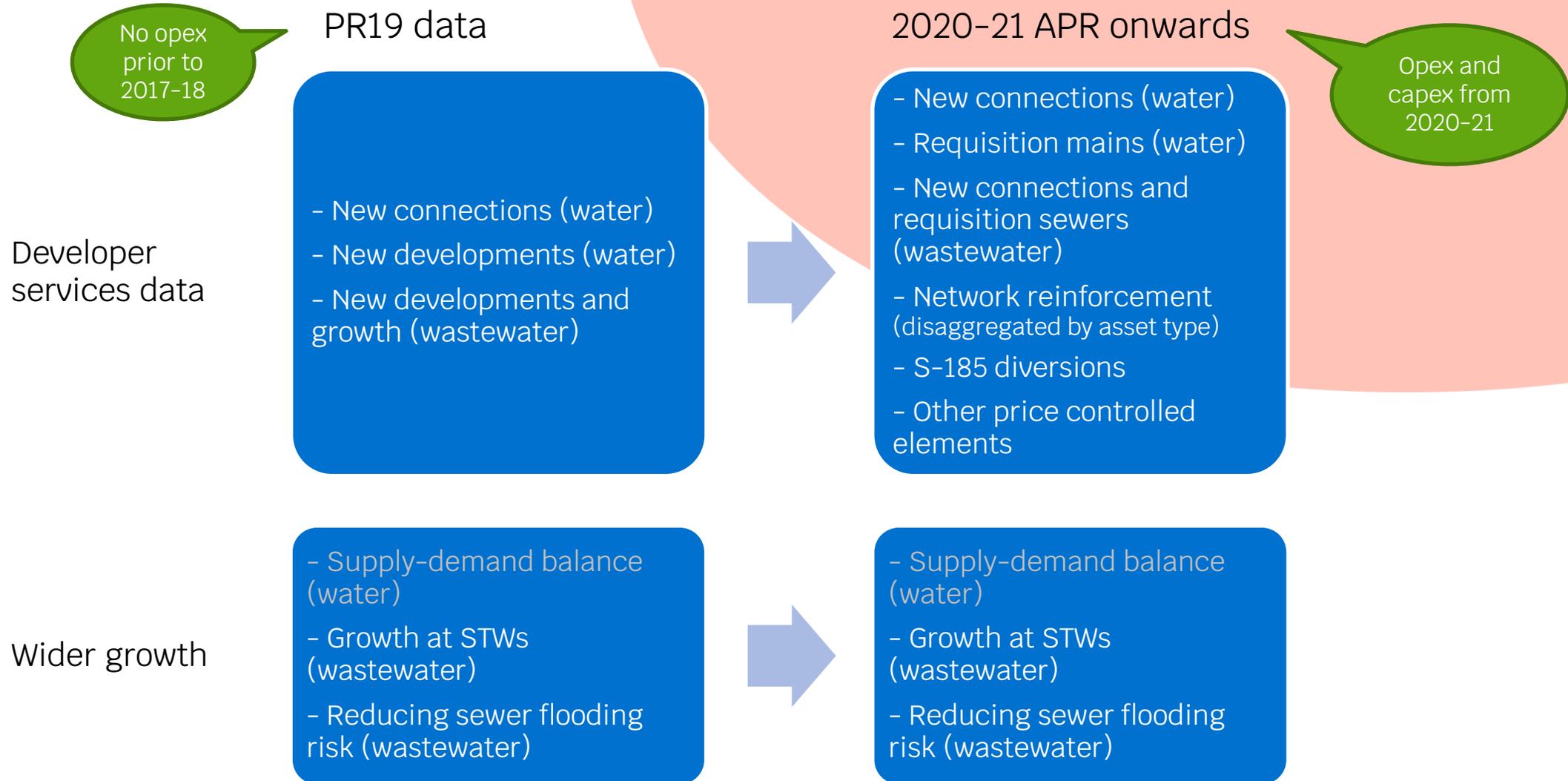
**Looking ahead to PR24, Ofwat**

## Work undertaken since PR19 and feedback from May consultation

- Regulation of developer services – we commissioned CEPA to produce a report reviewing the current approach to regulating developer services and producing a set of options and recommendations.
- May consultation – we consulted on CEPA’s proposed options for regulation of developer services.
- Data – we have collected additional developer services data to help us to make an informed decision on how to regulate developer services at PR24. More specially the additional data will:
  - Inform our view on whether an option that relies more on competition can be justified
  - Help refine existing uncertainty mechanisms
  - Support the evolution of cost assessment
- While there was no specific question on growth expenditure in our PR24 May consultation ‘[Creating tomorrow, together](#)’, a number of companies flagged growth expenditure as a **key area to prioritise** in our cost assessment work, and said that growth expenditure **should be removed from base costs for PR24**.

Note we do not summarise here feedback received on options for regulation of developer services, as the current presentation focuses on the assessment of growth expenditure. No decision has been made yet on regulation of developer services at PR24.

# Current data available – growth expenditure



# Current data available – growth cost drivers

## PR19 data

- New properties connected
- New connections
- DD developer services data request



## 2020-21 APR onwards

- New connections – by incumbent and SLP
- New properties – by incumbent, NAVs and SLP
- Length of new mains – by incumbent and SLP

Only one year of data so far

Only one year of data & not part of APR process

## Developer services data request

### Site specific information:

- Served by incumbent or NAV?
- Services required
- Connection type
- Household/non-household
- Nr connections, properties connected, length of main/sewer, length of comms pipe – by incumbent, NAV, SLP
- Percentage of contestable work undertaken by incumbent / SLP
- Site-specific construction costs and revenue
- Other developer services activities (exc. reinforcement) costs and revenues

# Options and issues to consider at PR24 – cost allocation

## Cost allocation

During PR19 there were **significant concerns over the allocation of growth expenditure**, For example:

- Some companies reported zero costs under historical new connections capex because they reported the costs as opex instead.
- Regulatory Accounting Guidelines (RAGs) also allow companies to apply a level of discretion when proportioning costs between growth related expenditure and capital maintenance.

These differences in reporting therefore made standalone growth and base model results misleading.

**Improvements have been made to the RAGs** in relation to the reporting of site-specific developer services costs and network reinforcement costs (e.g. alignment with the expenditure categories companies use to calculate developer charges), which should reduce cost allocation inconsistencies going forward.

But there are still concerns around the allocation of costs between growth, capital maintenance and other enhancement lines (e.g. SDB). **Can these concerns be mitigated?**



# Options and issues to consider at PR24 – cost assessment approach

## Cost assessment approach

Is there merit in attempting to assess growth related expenditure **outside of the base cost models** at PR24 if issues around cost allocation inconsistencies can be resolved?

If so, **what approaches** should we consider (e.g., cost benchmarking and/or deep dives). Are different approaches more suitable for different types of growth expenditure?

What **cost drivers** should we consider?

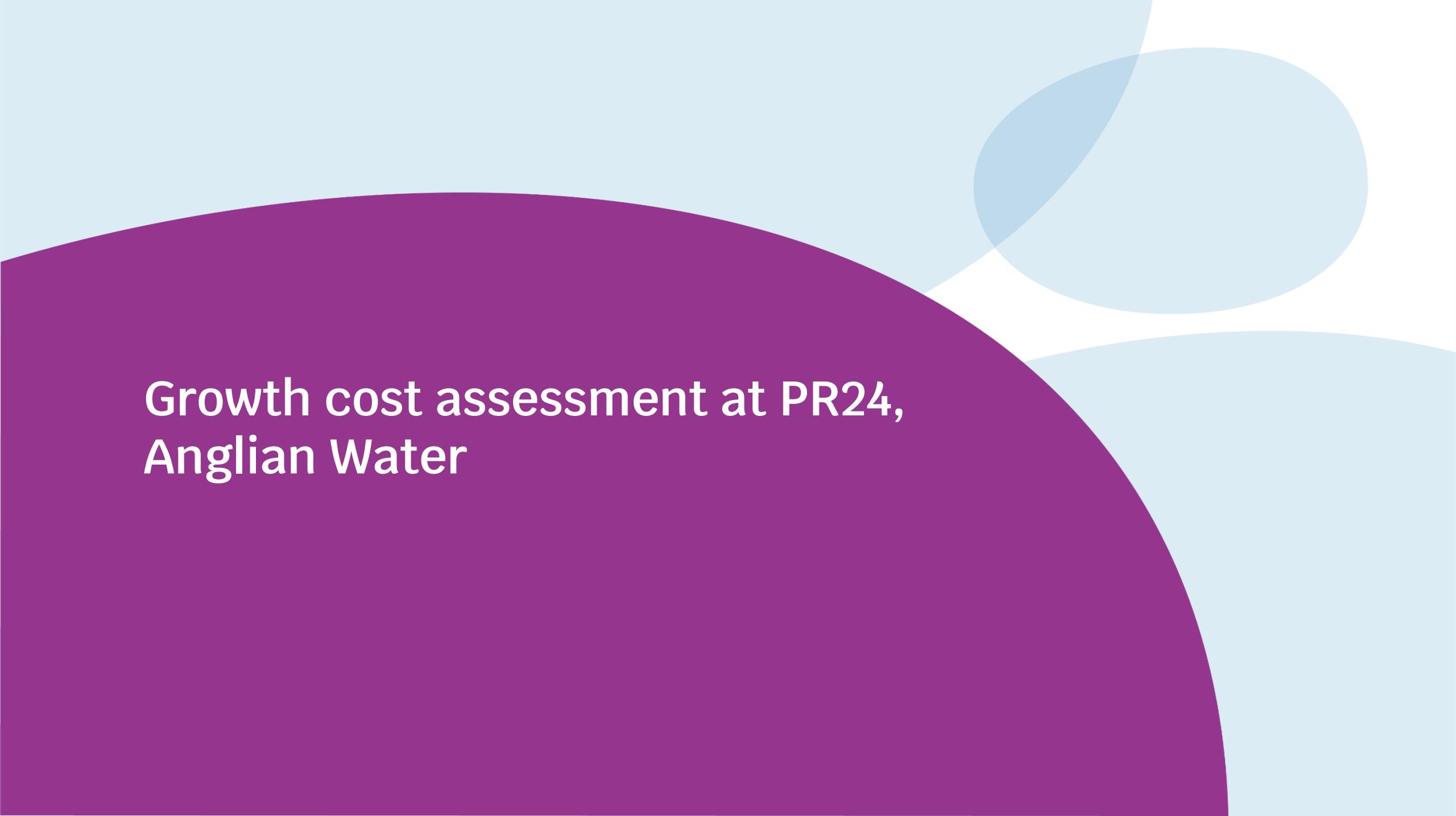
Do we need to collect **any additional costs / cost driver data** to enable a comprehensive assessment?

Should we ask companies to resubmit historical data on the same basis as the 2020-21 APR data, or **is data from 2020-21 onwards sufficient to conduct our assessment** (i.e., maximum four years of historical data)?

## Other issues

The forecast of connected properties and the DSRA may also need to be revisited.





# Growth cost assessment at PR24, Anglian Water

# Growth cost assessment at PR24 – for discussion



Anglian Water

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12 October 2021



# Agenda



- Types of growth;
- Data considerations;
- Options & cost assessment; and
- Conclusions & discussion.

# Summary

- Growth is a large catch-all term, there are different types of growth that could be considered differently in cost assessment.
- Cost assessment approach for growth is intrinsically linked to regulatory model, treatment of contributions, forecasting approaches and reconciliations.
- We could delineate between activities that are **standard and repeatable** and the more **complex and strategic** growth driven investments.
- **Enhanced data capture** is needed to evolve cost assessment.
- **“Standard” growth** could be modelled relatively simply. Strategic growth is more complex, lumpy and should be looked at separately.
- **“Strategic” growth** cost is influenced by the location of growth, is there an opportunity to agree PR24 planning assumptions/ scenarios? Risk sharing mechanisms can de-risk forecasting challenges for companies and customers.

# Why are we here?

## Evolving cost assessment for growth at PR24



Make the East of England resilient to the risks of drought and flooding



Enable sustainable economic and housing growth in the UK's fastest growing region



By 2030, be a net zero carbon business and reduce the carbon in building and maintaining our assets by 70%



Work with others to achieve significant improvement in ecological quality across our catchments

The treatment of growth was much discussed at PR19, with the approach evolving during the process.

Ofwat are considering their approach for PR24, noting that gathering additional data on costs, revenues and drivers will 'support the evolution of the cost assessment at PR24' and 'help with design of PR24 regulatory arrangements and the approach to cost assessment'. *Ofwat, Gathering data about developer services – data request, August 2021.*

Enabling growth is an important aspect of water industry operations in unlocking and facilitating economic growth and supporting markets. For Anglian Water it is one of our four strategic ambitions.

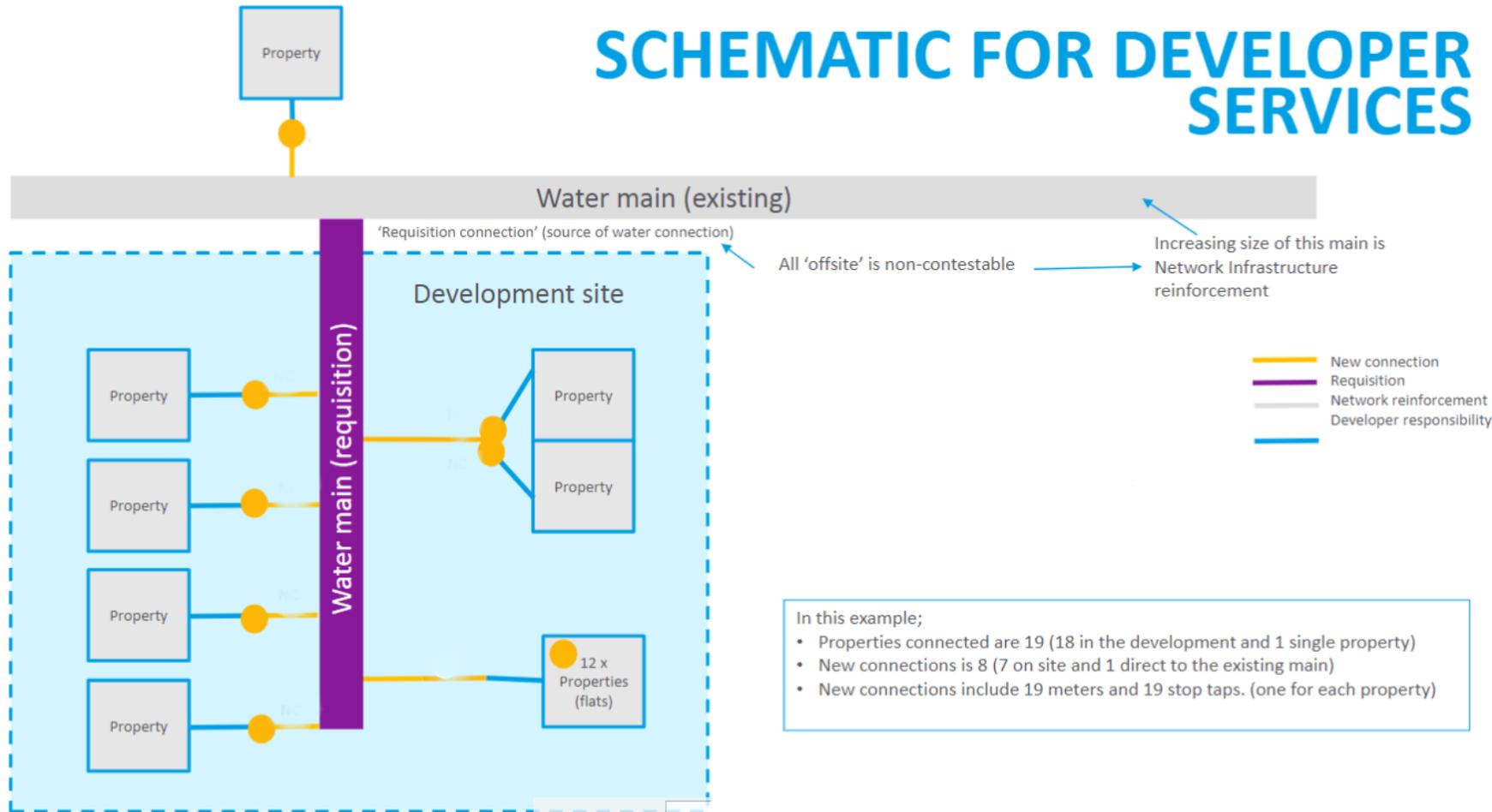
Growth is an important but uncertain driver of long-term scenarios. Increased emphasis from long term plans, such as Drainage and Wastewater Management Plans may indicate that historic data poorly reflects future needs.

# Types of growth



# What is “standard” growth?

## SCHEMATIC FOR DEVELOPER SERVICES



We consider standard growth to be site specific activity, up to the existing network / assets.

- This activity is repeatable and on the whole subject to competition.
- Activity on existing assets is less straightforward as existing headroom and wider strategic factors come into play.

# "Standard" growth

## Unit cost / unit contribution driven growth

### Explanation of cost driver

1. Repeatable activities driven by growth at company scale.
2. **Water mains** installation on site, **connection** to existing infrastructure. Simple civil engineering, standard plot width (6.42m) determines infrastructure requirement.
  - a. Variability of costs due to ground conditions / material selection.
  - b. In some instances variability due to installation in service corridor, standard pipe sizes.
3. **Connection** and **requisition of new infrastructure** from housing plot to wider water main and sewer. Excavation of the road / footpath to complete connection to the public supply, standard width of road determines service pipe / lateral installation length.
  - a. Variability of costs due to traffic management, ground conditions, surface type.

### Cost assessment

1. Ofwat have requested data on the costs for the "developer services" activities for standard growth.
2. Totex request should allow for better comparison between companies.
3. Issues with direct labour / overhead cost allocation that could limit effective cost comparison.
4. Consideration for the treatment of varying levels of competition between and within companies?
5. Information gathered could be used to set Totex requirements for companies' growth with an appropriate reconciliation mechanism to deal with any forecasting divergence.

# “Strategic” growth

## Enabling infrastructure for development areas

### Explanation of cost drivers

1. Infrastructure / non-infrastructure required for growth at local level to address supply (network or treatment) issues where existing headroom is limited.
2. This type of investment is lumpy and less homogenous.
3. **Network reinforcement** to extend or support the existing network to enable growth to occur at no detriment to existing customer base.
  - a. Often complex civil engineering in highway comprising of pipes, tanks and pumps.
  - b. Location of development drives requirement.
  - c. Timing dependent on development speed and available capital allowance.
4. **Treatment** expenditure to provide capacity for growth in supply area or catchment zone.
  - a. Complex civil engineering.
  - b. Timing dictated by headroom requirement from supply or external factors (EA permit)

### Cost assessment

1. Cost assessment is more difficult due to complexity of drivers.
2. Simple expenditure information gathered in APR, costs in infrastructure / non infrastructure tables.
3. Opportunities to enhance data capture and undertake more nuanced cost assessment.

# Case study

## Alconbury Weald - Huntingdon

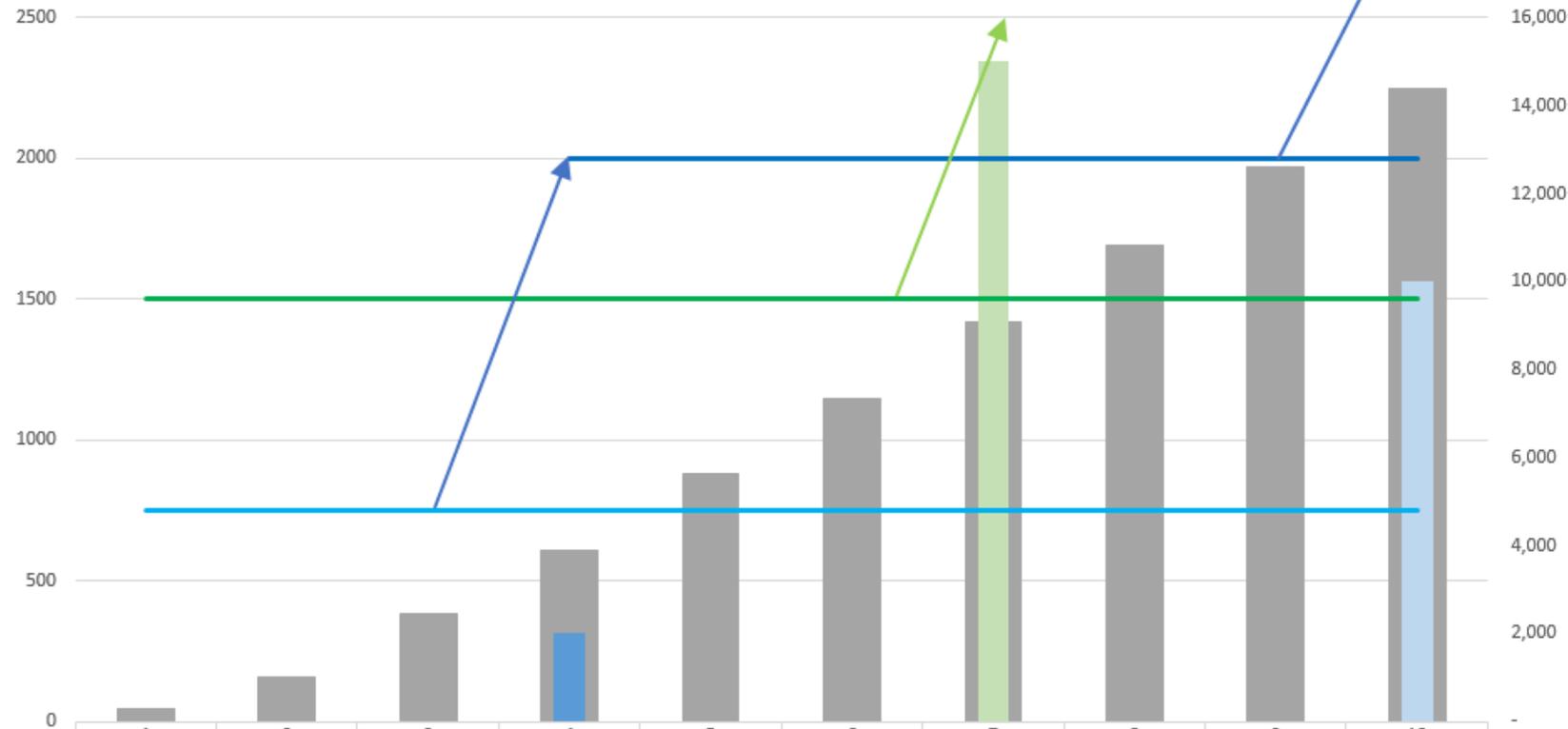


### Development

1. Former RAF base outside Huntingdon being developed equal to 2/3rds of the town.
  1. 15 years in pre-planning, limited infrastructure in surrounding area (rural village)
  2. 5,500 homes and adjoining enterprise zone.
  3. 20-25 year development plan
2. Water supply –
  1. New pumping station required in Huntingdon and reinforcement main (£2m) at ~750 plots connected
  2. Reinforcement main from Grafham reservoir to Huntingdon at ~2,000 plots (£10m)
3. Sewerage –
  1. New gravity sewer to Huntingdon WRC (including rail, river and A14 crossing x2) at ~1,500 plots (£15m)

# Alconbury Weald - Huntingdon

Alconbury Build Rate vs Headroom with Interventions



	1	2	3	4	5	6	7	8	9	10
Build Rate	45	158	383	608	878	1148	1418	1690	1970	2250
Expenditure (£k)				2,000			15,000			10,000
Water Headroom	750	750	750	750	750	750	750	750	750	750
Water Recycling Headroom	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Water PS				2000	2000	2000	2000	2000	2000	2000

## Key messages

1. “Standard” growth drivers captured by build rate over 20+ years
2. “Strategic” growth investment is lumpy and not linear with build rate

These differences create challenges for growth cost assessment

# Alconbury Weald - Huntingdon

## Water Recycling interventions

1. Existing local area network has capacity for 1,500 plots
2. Single intervention required to take flows from the development to the south of Huntingdon, direct route through urban area prohibitive on cost. Route required to the West, including Rail, River and two A14 crossing.
3. 18 month build programme
4. 4,000 plots enabled through intervention. £3.75k/plot / £833k/yr

## Water supply interventions

1. The existing local area network has capacity (headroom) to facilitate 750 plots to be connected to the “on-site” infrastructure.
2. The predicted build-rate requires an intervention before year 5, the initial intervention requires improving the supply from the adjoining town with a new pumping station and water main to the site.
3. The first intervention facilitates 1,250 plots and has a timespan of 6 years at £1.6k/ plot / £334k/yr
4. At 2,000 plots the strategic link from Grafham reservoir to Huntingdon reaches capacity and needs to be reinforced.
5. This intervention facilitates the remaining 3,500 plots with a timespan of 19 years. £2.86k/plot / £526k/yr

## Planning timescale

1. The development was promoted in early 2000, however work on site did not begin until 2015 (enterprise zone)
2. First housing plot connected 2016

## Timing of investment

1. Headroom in existing local area network determines the number of plots within the development that can be connected before there is an issue the supply to existing local customer base.
2. Investment of headroom restoration / improvement could be at any point prior to the number of plots exceeding the agreed amount. (developers / existing customers preference for low risk to supply with upfront investment)
3. Build rate of a development can vary significantly based on the local housing market strength.

## Conclusions

1. Providing strategic infrastructure for new developments is more complex than the more standard on-site activity.
2. While there may be some averaging at large company scale, costs vary hugely depending on asset headroom, location.
3. The capacity created for the future is a more important cost driver than the volume of connections in a given five year period.

# Making best use of data at PR24



# PR19 growth and developer data

## Availability and consistency reflections

### Challenges at PR19

1. Data for developer services and growth split between the developer services data table (App28) and the enhancement tables (WS2 and WWS2).
2. High-level data on costs and drivers. Generally just headline growth costs and volume of connections.
3. Analysis of unit rates and levels of competition at IAP suggested inconsistent completion of volume data between connections, properties, inclusion of self-lay and NAVs.
4. Cost & revenue reporting inconsistencies incl. classification of capex or opex, gross or net.
5. Network reinforcement reported with other activity e.g. New development in WS2 and New development and growth in WWS2. New development cost defined as local distribution assets, so what about wider network reinforcement? Inconsistency of application within supply demand balance.

### Recommendations for PR24, building on progress already made

1. Separate tables/sheets can be used, but this risks inconsistency.
2. Increase granularity of data collection – site specific data improvements in train through Ofwat data request and updated APR/RAGs (e.g. length of requisitioned main), strategic growth recommendations on following slide.
3. Ensure clear definitions for cost drivers. Connected properties can be interpreted as connections or properties, inclusion of NAVs and SLPs. Updated reporting requirements in the APR address some of these points, important they are retained in PR24 data tables.
4. Ensure consistent reporting of costs. Appropriate approach will depend on treatment of contributions.
5. Separate reporting of network reinforcement expenditure. This is now separated in the APR but there may be scope to enhance cost and driver data capture (see next slide). Further disaggregation of water recycling treatment costs and activity within the very broad band 6 category.

# Gathering data

## Potential areas for additional data collection to inform PR24 and PR29

### Network reinforcement

- Property capacity created by investment in pumping stations and pipes.
- Length of pipe laid, capacity/diameter, depth, number of infrastructure crossings (e.g. rail) and ground type.
- Number of pumping stations built or upgraded
- More granular reporting of costs, new build, mitigation/incremental upgrade, conveyance.
- Consistency review of reporting guidance for allocation of expenditure, review of interpretation of 'local distribution network' and boundary between expenditure directly linked to new development sites, or generic investment to maintain existing levels of service in the face of population growth.

### Water recycling treatment

- Existing flow compliance headroom in catchments where funding required.
- PE capacity created by investments (retain for PR24).
- Disaggregated expenditure by works band, further disaggregation of band 6.
- Consistency review of reporting guidance for allocation of expenditure between growth and maintenance.
- Number or scale of sites where permit compliance is 'beyond available technology'.

# Options and cost assessment



# Cost assessment

## Treatment of “standard” growth

### Ex ante allowance with ex-post reconciliation

1. Utilising the enhanced data capture of costs for “developer services”, unit cost driven expenditure.
2. Need to separate the domestic and commercial / industrial connections into distinct areas. Industrial connections (s55) can have significant impact on average unit rates.
3. Efficiency challenges need to be calibrated reflecting the repeatable, simple civils nature of the activity (i.e. limited scope for additional efficiency).
4. Unit rates derived from costs not contribution.
5. Reconciliation mechanism to be designed on costs to remove forecasting dependencies.

### Enabled by

1. Simple stand-alone cost assessment (i.e. separate from base costs and strategic growth).
2. Clear consistent data gathering / reporting from companies.
3. Consistent application of corporate overhead to developer services activities.
4. Efficiency challenges consistent with data revealed on standard growth and competition act obligations for contestable activities.
5. Reconciliation mechanism to reduce forecasting risk for companies and customers, to reflect changes in cost and contribution driven by variance in outturn.

# Cost assessment

## Treatment of “strategic” growth – network reinforcement

### Ex-ante regulation strategic growth

1. Company spatial planning to be used to determine forward growth enabling programme of infrastructure and treatment capacity.
2. Planning data to be used to forecast development level requirements with trigger points for investment.
3. Cost assessment considers the timespan of the plots enabled through investment.
4. Infrastructure charges to fund investment from developer customers over longer period to allow fairness of charges between AMPs.
5. Reconciliation of growth enabled due to prevailing housing market activity (if local housing demand changes from forecast in level or development area, company and customers need to be protected)

### Enabled by

1. Enhanced data capture to allow better company cost assessment for growth.
2. Consider cost categories separately (by service).
3. Planning data to be used to forecast development level requirements with trigger points for investment.
4. Separation of cost allowance form standard growth, growth costs within Enhancement.
5. Reconciliation mechanism to be designed to protect customers if the rate / location of development is lower than forecast, and to protect companies if rate / location of development is higher than forecast.
6. Network context & existing capacity relevant, which may make modelling difficult. Tailored approach or deep-dives could be explored.
7. Similarly future needs may not reflect historic activity levels.

# Cost assessment

## Treatment of “strategic” growth – treatment

### Ex-ante regulation strategic growth

1. Company spatial planning to be used to determine forward growth enabling programme of infrastructure and treatment capacity.
2. Planning data to be used to forecast development level requirements with trigger points for investment.
3. Cost assessment considers the timespan of the plots enabled through investment.
4. Cost recovery through wholesale charges, potential for multi-AMP approaches?
5. Reconciliation of growth enabled due to prevailing housing market activity (if local housing demand changes from forecast in level or development area, company and customers need to be protected)

### Enabled by

1. Enhanced data capture to allow better company cost assessment for growth.
2. Consider cost categories separately (by service).
3. Planning data to be used to forecast development level requirements with trigger points for investment.
4. Separation of cost allowance from standard growth, growth costs within Enhancement.
5. Reconciliation mechanism to be designed to protect customers if the rate / location of development is lower than forecast, and to protect companies if rate / location of development is higher than forecast.
6. Asset capacity relevant, which may make modelling difficult. Tailored approach or deep-dives could be explored.
7. Similarly future needs may not reflect historic activity levels.

# Conclusions



# Conclusions & discussion

## Cost assessment for growth at PR24



### Conclusions

- Growth is a large catch-all term, there are different types of growth that could be considered differently in cost assessment.
- We think growth expenditure could be considered as “**standard**” and “**strategic**” and there is scope to tailor the cost assessment approach accordingly.
- “**Standard**” **growth** could be modelled relatively simply and improvements in data capture are progressing.
- “**Strategic**” **growth** cost is more complex, with asset capacity/headroom, timing/lumpiness, location and scale influencing cost.
- A nuanced approach to assessing “strategic” growth costs (e.g. backwards and forward looking assessment, deep-dives), supported by further data capture, could focus resources and improve outcomes for customers and the environment.

### Questions

1. Do you support **evolution** of the approach to cost assessment for growth at PR24?
2. What are your views on our characterisation of growth as “**standard**” & “**strategic**”?
3. Do you agree that it is sensible to **tailor** the cost assessment approach for growth depending on the type?
4. What **data** do you currently **capture** on strategic growth costs and drivers? Would it be proportionate to report this additional data?

## Breakout room questions

1. Do you think we should consider different cost assessment approaches for “standard” growth (i.e. site specific) and “strategic” growth (i.e. network reinforcement and wider growth)?
2. Which approaches would be more suitable to each area?
  - Remain in base costs
  - Standalone benchmarking model(s) [backwards and/or forwards looking]
  - Shallow/deep dive
  - Other
3. What data do you currently capture on “strategic” growth costs and drivers? Would it be proportionate to report this additional data?
4. Is there evidence that the DSRA should be changed at PR24 (e.g. adopt the CMA approach)?
5. The changes to reporting requirements in 2020-21 APRs should have improved cost allocation issues:
  - Will the changes (e.g., new split of “standard” growth – tables 4N and 4O) enable better cost assessment?
  - Are there outstanding concerns over cost allocation between growth, maintenance and other enhancement lines (e.g. SDB)? If so, how can these be mitigated?
  - Are there concerns over the allocation of overheads? If so, how can these be mitigated?



**Nutrient neutrality**

## Nutrient neutrality

Following guidance issued by Natural England, planning permission for some new developments has now been made conditional on them achieving nutrient neutrality.

New developments may increase the level of nutrients entering river systems through wastewater containing nitrogen and phosphorous from human waste, food and detergents.

Nutrient neutrality may be achieved by developers funding measures to offset the increased level of nutrients. Currently we understand only two nutrient neutrality schemes are established (involving converting agriculture land to wetlands with reedbeds).

A potential alternative is for developers to pay water companies to reduce the nutrients discharged from sewage treatment works.

This policy area is fast moving, and we need to anticipate such offsetting schemes forming part of PR24.

**Does nutrient neutrality require changes to our cost assessment approach and/or broader regulatory framework?**



Closing remarks