Where does your money go?

Sales and annual fees income

• 40% R&D (coding, testing)
• 40% Support Services (support@tuflow.com, Wiki)
• 20% Admin, licensing and marketing (sales@tuflow.com)

Training income – break even

Software Business Unit since 2016

• Projects don’t come first anymore!
• Not just Phil, Sandy and Bill – TUFLOW Team now >10 full-time staff
HPC QuadTree

Mesh Refinement

- Reduce sizes of selected cells by factor of two
- Multiple layers of reduction
- 2D hydraulics and preliminary testing completed
- Input and output commenced (Major task)
One TUFLOW.exe

Moved TUFLOW FV alongside Classic, HPC and ESTRY

Greater integration of all engines

- ESTRY linked to all (Classic, HPC and FV)
- More seamless transition between engines
- Shared common functionality, inputs and outputs
- Potential linking of Classic, HPC, FV
Recent QGIS Developments

QGIS

• Ported TUFLOW Plugins to QGIS 3
  • Available now in the plugin repository
  • New workflow tools including:
    • Insert TUFLOW attributes to existing GIS layer e.g. 1d_nwk attributes and a council stormwater database
    • Quick TUFLOW layer styling
    • Quick Labelling
    • Australian Rainfall & Runoff 2016 auto storm generation tool (for Australian users)
  • Export plot data to CSV
Sneak Peak into the Future

ArcGIS, MapInfo and QGIS

- New tools to help with model building and workflow

TUPLIT

- Integration with model building and viewing outputs
  - On the fly 1D cross section editing in QGIS
  - Viewing water level results on cross sections
  - Viewing hydraulic properties using 1d_ta_tables_check.csv
  - Creating 1D open channel ESTRY inputs in QGIS
  - Troubleshooting complex 1D pipe networks
Crayfish by Lutra Consulting

- Being ported to QGIS 3
- Support for TUFLOW DAT, XMDF, grid and NETCDF outputs
- Faster and Files > 2Gb
- Data calculator
- 3D Canvas support
- Time series, long-section, cross-section
Flexible Licensing Options

- Perpetual
- Yearly Subscription
- Monthly Rental Service
- Daily – Cloud Simulation Service
  - Ideally suited for short term, bulk simulations
- Hosting Network Licenses on the Cloud
- Enterprise Agreement
Flood Modeller

- Linking Flood Modeller and TUFLOW HPC

Flood Cloud

- Running TUFLOW in Flood Cloud
FloodIntel

• Intuitive: no training required
• Web-based: no license restrictions
• Real-time: integrates multiple data feeds and formats
• Customisable: to each floodplain and each user
Properties at Risk

**Fluvial / Coastal Flooding**
Simple in/out of flood extent

**Surface Water Flooding**
Typically more disperse and fragmented

**RoFfSW PPD**
Basic Principles of Analysis
EA, July 2014
And…

- Bridge Loss Calculator – Utility
- Flood Damages – Utility
- Debris and blockage modelling (EA/DEFRA guidance SC110005)
- TUFLOW HPC Advection Dispersion
- TUFLOW HPC Turbulence model enhancements (prandtl, k-omega / k-epsilon)
- And much, much, more
  (over one hundred “minor” enhancements on list)