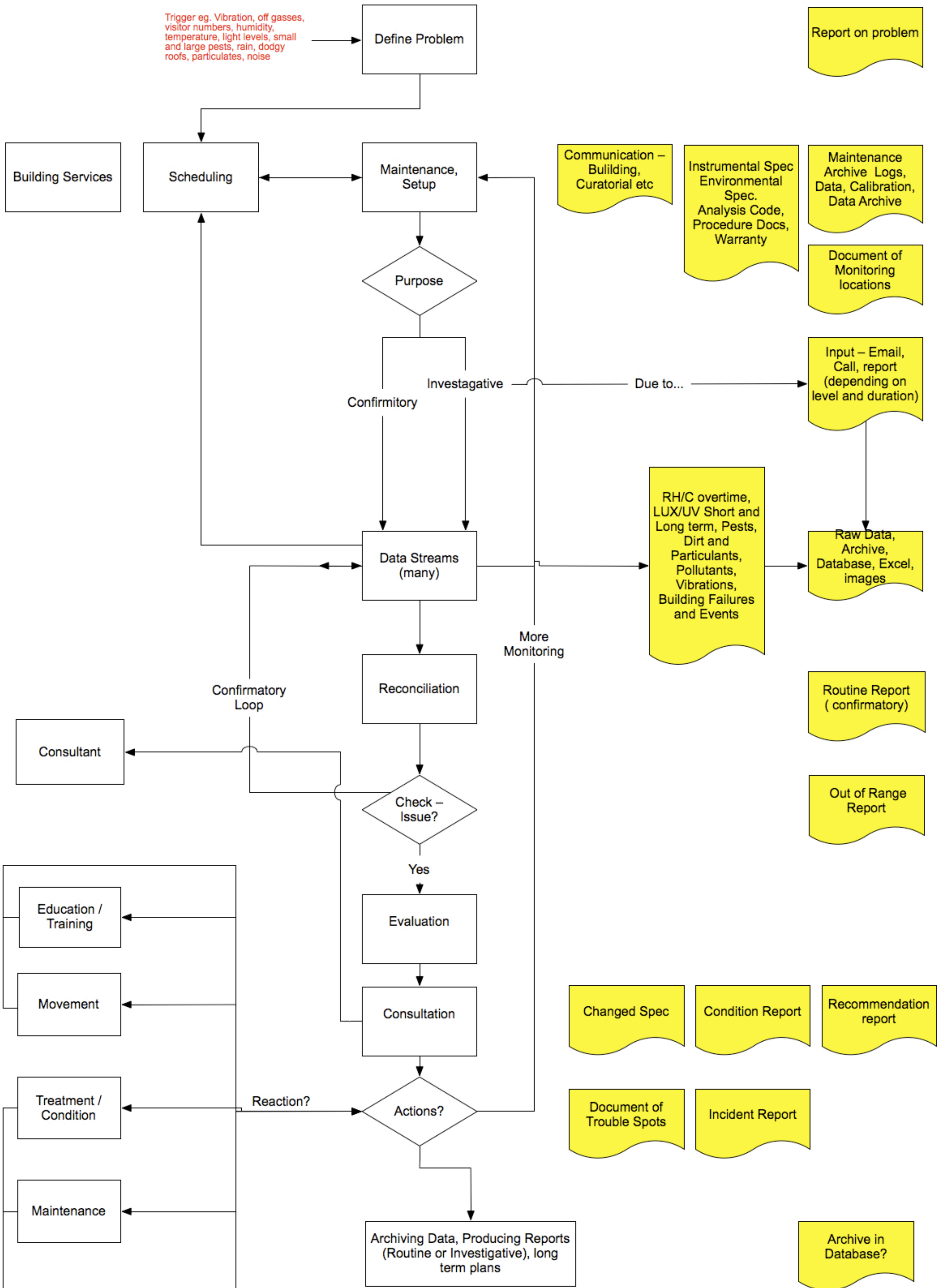


Trigger eg. Vibration, off gasses, visitor numbers, humidity, temperature, light levels, small and large pests, rain, dodgy roofs, particulates, noise



RH/°C
OVER TIME

WAX/UV
SHORT- +
LONG-TERM

PESTS
(INSECT)

BUILDING
FAILURES
+
EVENTS

DIRT
+
PARTICULARS

POLLUTANTS
(GAS + AEROSOL)

VIBRATION

ENVIRONMENTAL

MONITORING

COMMUNICATN
PATTERN
(HUGE)

CONFIRMATORY

INVESTIGATIVE

INSTRUMENT
SPEC,
OPERATIVE
PROCEDURE,
DOC.S,
WARRANTY

ENV.
SPEC.

ANALYSIS
CODE

SCHEDULING

MANY
DATA
STREAMS

CALIBRATN.
DATA

MAINTENANCE
LOGS

DATA

DOC OF
TROUBLE
SPOTS

RECONCILIATN.

OUT OF
RANGE
ALERT

IMAGES

DATA
ARCHIVE

DOC OF
MONITORING
LOCATN.S

EVALUATN.

EXCEL

GIS/
ACAD

CONSULTATN.

ROUTINE
REPORTS

ACTION

RECOMMEN

MORE
ANALYSIS

INCIDENT
REPORT/
OBJECT

OBJECT
MOVEMENT

CHANGED
SPEC

Environmental Monitoring 1: Discussion Summary

Two discrete groups based on outputs

- Confirmatory (is something happening)
- Investigative (how bad is it)

Big communication pattern on this, a lot of people involved, conservators have to step outside of the curators and their own depart

- Facilities people
- Administration

Some basic specifications for env.

- Equipment for monitoring
- Calibration data
- Collected data
- Have some sort of idea of an environmental specification in your head?
- Instrumentation, data acquisition specification, warranties, contracts with pest specialists
- Analysis code
- Calibration data for automated systems.

Many data streams

- The conservator may not control all of the data streams. So there has to be reconciliation where different data streams are consolidated.
- All data has to be evaluated
- This may involve consultative activities
- Action
- Remediation
- Object movement
- New specification
- Scheduling for all of the above
- Documentation of trouble spots
- Knowledge management of what is often implicit knowledge in institution.
- Must have some way of understanding the maintenance of these objects and the data
- Need to archive the raw data in some understandable format
- Need to get this information out and into something understandable
- Excel charts are huge and all monitoring seems to lead to excel files
- It may be that you do not control all the data streams, there has to be some reconciliation process where different data streams are brought together and some evaluation is made of who is right

Evaluation process

- Might be some sort of “out of range” alert
- At some periodic interval all the data is going to be evaluated by a code or a human being and try to make decision and as a result you might get into a consultative process, and you will take some kind of action, which will

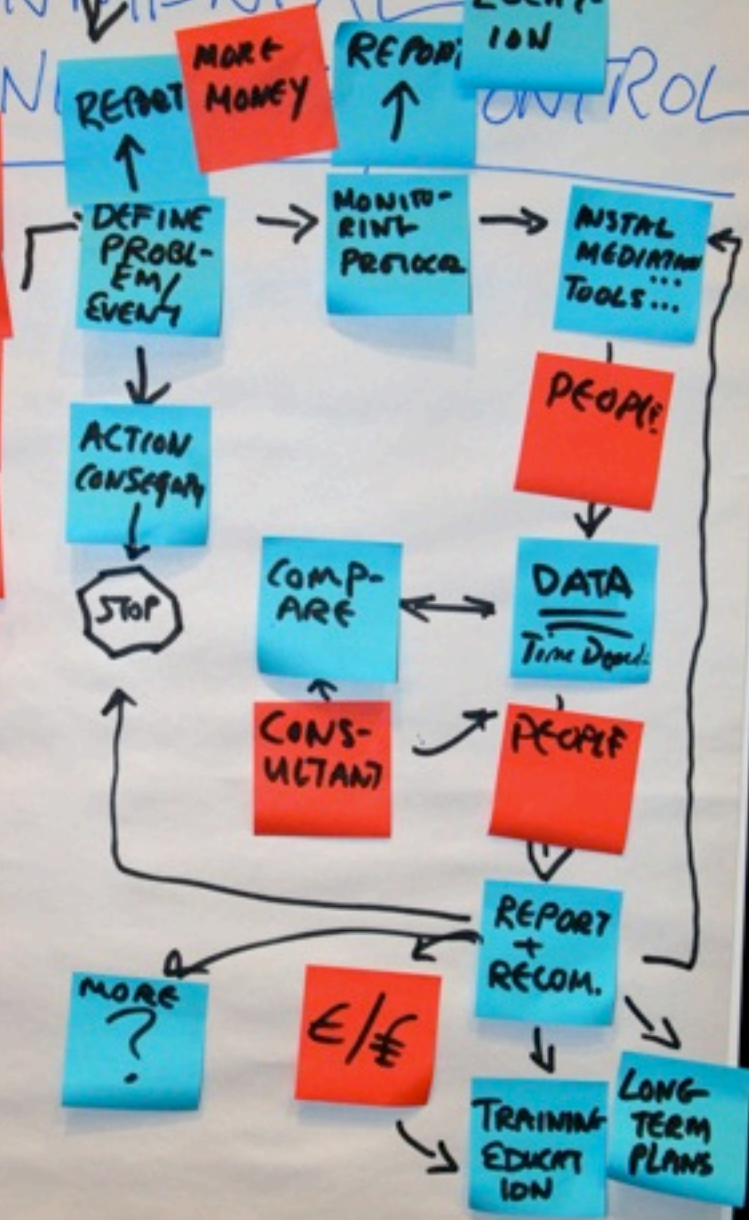
lead to a range of documentation, might lead to object movement, and so incident reports on a per object basis and some sort of scheduling process

- The other thing is documentation of trouble-spots—this particular room is not good, or this roof consistently leaks etc.
- Evaluation-consultation-action may happen quickly or sloooooowly...

TIME FRAME = ASAP → ∞

ENVIRONMENTAL CONTROL

- How
- TRAPS
- Employ Educate IT...
- MOUSE TRAPS
- SENSORS Light Meter
- €/£?
- Priority Time frame
- HUMAN RESOURCES
- Nature of coll. or site
- Small Large or mix
- PEST
- DUST BUILDING FABRIC RAIN
- NOISE, food, etc. events



- Customer Complaint PUBLIC
- Potion Pool?
- VIBRATION
- off gases (packaging)
- ZNV. GASSES O₂, O₃, NO₂, ...
- VISITORS
- RH
- T
- light UV-VIS

Environmental Monitoring 2: Discussion Summary

Green - activities

Red – dependencies

Blue - outputs

Start with potential problem identified and decide we want to do some monitoring

- Example: Vibration, off gasses, visitor numbers, humidity, temperature, light levels, small and large pests, rain, dodgy roofs, particulates, noise
- Example: If we have mouse traps, how do we monitor them?

We want to store the details of the event that precipitated the issue.

Do we need to educate people?

Do we have resources?

What's our timeline?

What's the nature of the collection?

We write reports—and then we might decide to do the monitoring or not

Write another report

Mediation – do we have enough people?

We come up with data that we want to store; we may want to compare this with old data. We may want to consult with external people

When you say you are storing data—do you mean information?

- Both
- Want to store raw data and information.

We write a final report with recommendations

Then we may stop or we may do more monitoring and mediation

Time frame could be a 2min measurement or a 20 year program

BPMN Environmental Monitoring

