

**Concept Plan CF 2015-024**

# **BioSys – the Western Australian Biological Survey Database**

**Ecoinformatics**

## **Project Core Team**

|                              |            |
|------------------------------|------------|
| <b>Supervising Scientist</b> | Paul Gioia |
| <b>Data Custodian</b>        | Paul Gioia |
| <b>Site Custodian</b>        |            |

**Project status as of July 12, 2018, 5:18 p.m.**

Update requested

**Document endorsements and approvals as of July 12, 2018, 5:18 p.m.**

|                       |         |
|-----------------------|---------|
| <b>Project Team</b>   | granted |
| <b>Program Leader</b> | granted |
| <b>Directorate</b>    | granted |

# BioSys – the Western Australian Biological Survey Database

## Biodiversity and Conservation Science Program

Ecoinformatics

## Departmental Service

Service 5: Conserving Habitats, Species and Ecological Communities

## Aims

This project aims to build and develop a new database, **BioSys**, that provides a central repository for data generated through biological survey within the department. While there are many kinds of biological data, survey data comprises a large proportion of biological data collected by the department.

**BioSys** will be implemented in a three-phased approach:

Year 1: Build database to support Kimberley Land Conservation Initiative (LCI) monitoring data

Year 2: Extend database to Kimberley Island survey data, commence development of offline data entry tool

Year 3: Complete offline data entry tool

## Expected outcome

BioSys will address many of the issues and risks outlined above. These include:

- Increased consistency in, and availability of, biological data
- Data protected in perpetuity
- Improved security and backup for legacy and operational databases
- Improved integration with other departmental systems
- Improved capacity for reporting, research and analysis of observation data.
- Improved compliance with government requirements for knowledge management
- Improved credibility of the department in protecting and making data available

In the longer term BioSys is expected to take over all or part of the role of NatureMap, built on modern, supported architecture.

## Strategic context

The requirement for managing and retaining biodiversity data and information, and the current capability gaps within WA, have been highlighted in a number of strategic documents, including:

- A survey database was identified as a high priority item within the Science Division Strategic Plan, 2008-17 (Science Division, 2008).
- The need for a corporate survey database had been highlighted in a number of high-profile reviews, including a vegetation mapping workshop held in 2008 (Salt *et al.*, 2008).
- The Barnett report into a Western Australian Biodiversity Knowledge System identified "...efficient and effective access to historical information" as the most important industry need (Australian Venture Consultants, 2012).
- That same report included information management as one of four essential pillars in a pathway to enhance knowledge management, which has since been reflected in the establishment of the WA Biodiversity Science Institute and the Informatics node.

## References

Australian Venture Consultants (2012) Pathway to an Enhanced Western Australian Terrestrial Biodiversity Knowledge System, August, 2012, Perth, WA.

Salt, C., Burrows, N., Coates, D. & van Leeuwen, S. (2008) Vegetation information management system: the need for a new vegetation map of WA: Vegetation Mapping Workshop. Department of Environment and Conservation, 23-24 July 2008, Woodvale, WA.

Science Division (2008) A Strategic Plan for Biodiversity Conservation Research 2008-2017. Department of Environment and Conservation, Perth, WA.

## Expected collaborations

The IT sections of organisations typically hold systems such as BioSys at arms length, restricting themselves to the core functions of file, mail, print. In recognition of Parks and Wildlife as a data-rich department, and in response to government public service requirements, the Office of Information Management (OIM) established the Knowledge Management Initiative (KMI) in 2015, with the aim of improving knowledge management across the agency. Because of its strategic importance and benefit to the organisation, OIM has been collaborating with SCD to develop BioSys, and providing in-kind support and assistance. This is expected to continue through the life of the project.

There has been interest from at least one other State conservation agency to co-fund the development of an offline data entry tool.

## Proposed period of the project

June 30, 2015 – None

## Staff time allocation

| Role         | Year 1 | Year 2 | Year 3 |
|--------------|--------|--------|--------|
| Scientist    | 0.4    | 0.4    | 0.4    |
| Technical    |        |        |        |
| Volunteer    |        |        |        |
| Collaborator |        |        |        |

## Indicative operating budget

| Source                    | Year 1 | Year 2 | Year 3 |
|---------------------------|--------|--------|--------|
| Consolidated Funds (DPaW) | 70K    | 70K    | 70K    |
| External Funding          |        |        | 80K    |