

THEME:

ATMOSPHERE

SUB-THEME

Urban design
BUILT ENVIRONMENT

Why do we need these natural assets?

Need To Control Our Built Environment To Provide The Community With The Best Outcomes.

- NOISE POLLUTION
- OPEN SPACES
- URBAN BLUE SPACE
- CLEAN AIR

Health

What are the threats - actual & potential?

- INCOMPATIBLE INDUSTRIES & ACTIVITIES THAT GENERATE NOISE POLLUTION
- OPEN SPACES ARE REMOVED/MODIFIED/REDUCED
- INCREASED URBANISATION TO PRESERVE THE NATURAL ENVIRONMENT - CAN LEAD TO A LOSS OF BLUE SPACE
- INDUSTRIES THAT GENERATE SMOKE/ SO₂ OR AFFECT AIR QUALITY
- POOR URBAN PLANNING - INCOMPATIBLE LAND USES IN CLOSE PROXIMITY
- BETTER ROAD DESIGN CAN REDUCE AIR POLLUTION FROM VEHICLES
- INCREASED TRAFFIC INCREASES NOISE & AIR POLLUTION

Sensitive Planning Policy

Planning Protecting Trees

Lack of Sound Pollution

Urban blue space
Smart planning

What is needed to protect & value these natural assets? why?

We will ...

STRATEGIC AIM

BUILD BETTER PROTECTIONS INTO OUR PLANNING SCHEME

to ensure our community can enjoy living in the city

Consider all species in our planning

We will reduce the impact of the built environment on the natural environment

WELL-PLANNED PUBLIC TRANSPORT TO ASSIST EMISSIONS REDUCTION.

AIR.
- more wordsmithing.
- Reduce - word in positive not negative.
- more aspiration.

THEME
ATMOSPHERE

SUBTHEME
Air quality/
health

Why do we need these natural assets?

- CLEAN AIR → respiratory health
↳ clean water → rainwater (health)
- ABUNDANT SUNSHINE → flora & fauna growth;
impact on micro-climate;
impact on biomes & habitats
- Low ~~to~~ LIGHT POLLUTION → fauna health/activities/ (nocturnal species)
sleep behaviour
→ human mental & physical health
- sleep behaviour
- night sky/star visibility

What are the threats - actual & potential?

- Herbicide use
- Dust
- Smoke
- Population growth
↳ more cars → FUMES
↳ more industry →
↳ more clearing → less natural filtering & mitigation
↳ more urbanisation → LIGHT POLLUTION
- General smog → respiratory issues
↳ water quality / rainwater issues
- **DEFORESTATION**
- **ARTIFICIAL LIGHT SOURCES** ← more urban = more light
↳ Impact on fauna (nocturnal) & people

INTER-GOVERNMENTAL LIASON

POOR PLANNING

POLICE REGULATION

PROSECUTE OFFENDER
SEE BANKING ROYAL COMMISSION

OFF-SETS Policy FROM LVRC.

Particulate Pollution - dust, smoke, fumes, industry

Clean Air

Lack of Light Pollution

NIGHT SKY

What is needed to protect & value them? Why?

LACK OF COMPLIANCE

STRATEGIC AIM

BEST PRACTICE PESTICIDE USE.

REDUCE BURNING FARM/INDUSTRY WASTE

RECYCLING PLASTIC: RAILWAY SLEEPERS

we will maintain our air quality in rural areas and improve air quality in urban areas

Abundant sunshine.

Clean air = clean water (rainwater) tanks

Herbicide Spraying

THEME:

ATMOSPHERE

SUB-THEME

CLIMATE CHANGE MITIGATION

Why do we need these natural assets?

- RETAIN OUR WAY OF LIFE
- REDUCE EFFECT OF WEATHER CHANGES Incl GLOBAL WARMING
- PRESERVE NATURAL ENVIRONMENT
- PROTECT WATER RESOURCES & OUR ENVIRONMENT

What are the threats - actual & potential?

- Global warming / climate change
 - ↳ increased temperature
 - ↳ increased extreme events
- Loss of natural resilience / climate changing faster than can be adapted to
- Extreme bushfires (increased temperature, decreased rain)
- Big floods
- Big droughts

CLIMATE CHANGE MITIGATION

CLIMATE

AIR TEMPERATURE

RAISE AWARENESS OF POLLUTION

TECHNOLOGICAL EMISSION REDUCTION

EDUCATION OF STAKE-HOLDERS

REMOVE POLITICS AND LEGISLATE !

INCENTIVE FOR EMISSION REDUCTION

What is needed to protect & value these natural assets? Why?

We will...

DYNAMIC ADAPTATION

LOOK FOR POSITIVES

IS CLIMATE CHANGE ALL BAD ?

Plant 1 billion trees

STRATEGIC AIM

Reduce the negative impacts of climate change

Reduce / stop activities that contribute to climate change

AIM AT STABILITY

We will work to create an environment & community that is resilient to & does not contribute to climate change

We will Reduce 1 off plastic use

THEME
FAUNA

SUB
THEME
HABITAT

Why do we need these natural resources?
 Food | Breeding | shelter | Roosting | Hollow
 NESTING | EROSION CONTROL | mitigation.
 Oxygen | Dust | Diversity | Resilient
 Ecosystems serv | Ecosystem Health
 Human Health | amenity | Tourism | economics
 Protects Agriculture. Protect beneficial insect habitat.
 (link with interdependent with agriculture)

What are the threats - actual + potential?

- Humans (development) over grazing
- Logging - recreational use - illegal
- extensive industry - illegal harvesting
- Fauna | Flora - inappropriate fire
- changes in hydrology -
- Planning legacy decisions -
- Lack of research / knowledge / education
- Historical science / political / planning decisions
- Climate Change
- Pest + diseases that threaten habitat
- Erosion from pigs + other
- Arson
- Lack of engagement with Traditional Owners to develop baseline + data.
- Inappropriate offsets.
- Lack of baseline data.

Education - Protection
 Best practice management
 Land use change - grazing or
 over use of

Sticky notes:

- Awareness
- Research
- Food sources for fauna
- WILDLIFE REPRODUCTION
- Engagement
- Long Term Vision
- Efficient use
- Awareness
- Understand their value
- PROT & RESTORATION
- LOCAL RESOURCE
- WAL USE

We will.....

STRATEGIC AIM

- Have an educated community; influencers, politicians, children.
- Have long-term vision for habitat management & protection
- Have research for developing baseline data / we will have baseline data.
- Have a community that engages in protection of habitats.
- Collaborate & work together to mitigate/eliminate threats to habitat.
- Manage, protect and enhance natural habitat

FAUNA - Habitat
 - Add expand.

Restore low habitat areas/eggs.

THEME
FAUNA

SUB
THEME
NATIVE

Why do we need these natural assets?

- Unique warm + fuzzy
- Cute + cuddley. NATURAL BEAUTY
- Integral part of ecosystem
- Involve locals in research, especially Traditional Owners
- Economic prosperity TOURISM. Attraction
- they belong here
- important culturally
- Provide ecosystem services
- Their intrinsic value & to enrich our lives

What are the threats - actual & potential?

- Lack of T.O. engagement. (Traditional Owner)
- Stress related pathogens / diseases
- Road traffic / motor vehicles
- Development / lack of or destruction of habitat.
- Inappropriate offsets. - lack of financial help to protect fauna
- Movement / Relocation of wildlife to other areas & then they die.
- Pests + pets.
- Pollution. - Lack of baseline data (abundance + wildlife distribution)
- Fire. - un-friendly farms
- Natural disasters
- Climate change / ↑ temperature & ↓ rainfall
- Lack of research + knowledge
- Desertification / lack of fertility.
- Lack of resources (food + water)

- EDUCATION
- LONG TERM VISION
- RESEARCH TO ESTABLISH BASELINE DATA
- FAUNA PROTECTION, RESTORATION AND HABITAT STEWARDSHIP
- COMMUNITY COLLABORATION + ENGAGEMENT
- UNDERSTAND VALUE OF FAUNA
- EFFICIENT USE OF LOCAL HUMANS (g ua.)

What is needed to protect value these natural assets?

STRATEGIC AIM

We will protect conserve & restore native fauna & their habitats

FAUNA - native fauna. guiding principle

- Have a long term vision for wildlife and their populations.
- Have adequate research to develop sound baseline data
- Use scientific data, community & T.O. knowledge to assign values. & inform & undertakes actions.
- Have a Council & community that supports & resources the protection, restoration & stewardship of native fauna & their habitats.
- Have a process that continually involves all stakeholders in the collaborative planning & management of wildlife & their habitats.

- MIGRATORY MAMMALS
- Threatened
- NATIVE MAMMALS
- INVERTEBRATES
- FROGS
- INSECTS
- NATIVE WILDLIFE including rare species
- REPTILES
- BENEFICIAL INSECTS
- Native Fauna Internationally significant. BIRDS
- MONOTREMES
- BIRD COLONIES
- MONOTREMES

THEME

FAUNA

SUB THEME

PEOPLE

Why do we need these natural assets?

PEOPLE
COMMUNITY

people have the power to protect

Diversity + Community

land management

Human diversity

What are the threats actual & potential?

Passionate People

Threats to Food Water + Air quality

Environmental Degradation

Climate Change

Increased community collaboration + responsibility

population management ??? controversial

Efficient use of local resources

POWER TO DESTROY

lack of knowledge + education

Education

Collaboration + engagement

Community buying in

HUMANS

Research

Awareness

Long term vision

What is the value of these assets? why?

We will....

STRATEGIC AIM

Encourage human engagement & connection with the natural environment/fauna.

THEME
FLORA

SUB THEME
COMMON NATIVE FLORA & VEGETATION COMMUNITIES

Why do we need these natural assets?

- SOIL MANAGEMENT & GROUND COVER
- HABITAT
- BIODIVERSITY
- AMENITY (SOCIAL WELLBEING)
- AIR QUALITY
- LAND FUNCTION (WATER TABLE)
- LANDSCAPE RESILIENCE

QUALITY OF LIFE
HEALTHY & SUSTAINABLE VEGETATION

Native Flora

EUCALYPTUS

VEGETATED RIDGE

(Hillside) Vegetation

HABITAT for fauna

HABITAT for flora

CEMETARIES

4 NATIVE GRASSES

Native grasses

Areas of native grass

IRON BARK FOREST

WOODLANDS

NATIVE FLORA & VEGETATION COMMUNITIES

Native Street Trees

What are the threats - actual & potential?

- Human activities
- + Land clearing
- * Pests & Weeds
- * Fragmentation
- * Overgrazing
- * Ignorance
- * Fire.
- * Climate change
- * Agricultural herbicide spray drifts.

lack of finance to help

LACK OF PROTECTIVE MACHINERY (GRASSIES)

lack of protection governance

- Effective legislation & policy (incl. political will to implement)
- Diversity of protection mechanisms incl. private & public land
- Effective management
- Research to improve knowledge for management
- Resources to identify & record
- Education to increase awareness & improve protection/compliance
- Coordinated, cross-tenure conservation
- Understanding of extent of flora & communities (baseline data)

Control introduced biological threats to native flora (e.g. FUNGUS)

What is needed to protect & value these natural assets? why?

all

STRATEGIC AIM

We will...

→ We will conserve and restore native plants and ecosystems accounting for diversity, abundance and distribution (adaptive management)

FLORA - common.
→ As we learn adapt Strategy.
- Adaptive mgmt.

* Need to define native = history (past, present & future)

THEME
FLORA

SUB-THEME
EXOTIC PRODUCTION
FLORA

Why do we need these natural assets?

- FOOD FOR ANIMALS & HUMANS
- ECONOMIC INCOME
- Habitat, nesting, Breeding, Hollows.

Food crops

PASTURES

NON NATIVE
EDIBLE
VEGETATION
FOR WILDLIFE

What are the threats - actual & potential?

- Introductory of Pest species
- Diseases
- Lack or excessive water.
- Cost of water. OVER GRAZING
- Climate change
- Regulation
- Over-use of water for irrigation

- regulation of water extraction
- measurement of water extraction
- Understanding of extent of weeds & feral animals

What is need to protect & value them? Why?

We will.... STRATEGIC AIM

- Reduce the negative impact of exotic flora (both in environment and agriculture/horticulture/silviculture)
- Reduce the negative impact of exotic fauna

FLORA. exotic.
• Negative wording.
• Enhance positive.
• Manage properly to not impact native

Where they are having an impact - location.
- ~~map~~

THEME

FLORA

SUB
THEME

RARE NATIVE
SPECIES
RESERVES

Why do we need these natural assets?

- BIODIVERSITY
- ECOSYSTEM FUNCTION
- HABITAT FOR FAUNA
- ECO TOURISM

REMNANT
VEGE

Remnant
vegetation

S.E.V.T.
(see serv) ON PRIVATE
PROPERTY

Ancient
old growth
TREES

Ecosystems

THREATENED
SPECIES

THREATENED
ECOSYSTEMS
& THREATENED
SPECIES

What are the threats
- actual & potential?

- HUMAN ACTIVITIES
 - x Land Clearing +
 - x Pests + Weeds
 - x Fragmentation
 - x Overgrazing
 - x Ignorance
 - x Climate change
 - x Fire
 - x Enforcement

Harvesting &
collection of
- Diseases of
invertebrates

LACK
OF
AWARENESS

FIRE
MANAGEMENT

POSITIVE
POLICY FOR
COMMON
FLORA

LACK OF
INCENTIVE

lack of
finance
to help

Legislation to protect species &
political / government will &
resources to implement / comply legislation

- Resources to find & identify
- Protective mechanisms (diversity)
eg. reserves, SAC's, Shireland
- Education to increase awareness &
increase protection / compliance
- Coordinated cross-tenure cooperation

What is needed to protect &
value these natural assets? why?

We will...

STRATEGIC AIM

protect & recover threatened plants & ecosystems

EXPAND
REGEN-
ERATION
(re-claim
weed areas)
CORRIDORS
TO ASSIST WITH
BUILDING
VES.

FLORA - threatened
o Recovers to what?
o Recovers species &
systems
o Repair / recover
considered
breeding

THEME
LAND

SUB THEME
GEOLOGY

Why do we need these natural assets?

- DIVERSITY IN ECONOMY.
- SKILLS TRAINING
- EMPLOYMENT
- Provides underlying structure
- Water 'transport'
- INFRASTRUCTURE CONSTRUCTION
- UNIQUE ECOSYSTEM DIVERSITY
- ENERGY
- HISTORY

What are the threats - actual + potential?

- UNDER UTILISATION (WASTE)
- Over utilisation
- Geological disturbance
- END US
- Natural gas depletion??
- erosion
- SURFACE DEVELOPMENT
- SOCIAL LICENCE
- Fricking, fracking.
- Water table depletion
- Mining

- INDUSTRY ENGAGEMENT
- LEGISLATION
- GOVERNMENT TO OWN THE PROBLEM
- GROUND WATER MONITORING
- TRANSPARENCY
- PLANNING
- Education
- Baselines
- \$

What is needed to protect & value these natural assets? Why?

We will...

- Reduce waste of mineral resources
- Return land for others to use
- Develop innovative products to extract the most value
- Reduce our footprint by reusing existing disturbance

STRATEGIC AIM

- Investigate renewable alternatives

hard-Geology.

- Standards of by-product of industry?
- Product & maintain.
- Operation of industry
- Does it belong in this plan?
- Resources extracted?
- Sub theme - extraction

- + Relate to practices of extraction.
- + Adequate separation industry / environment.
- + Look at use of resources.
- + use of material.
- + theme - geology much bigger than aim.
- limiting - broader to recognise geology.
- + Geology to extract

Non renewable resources.

- Gap - Energy / jobs.
- Rename Sub theme: Non renewable resources / assets.

THEME

LAND SOIL

Fungi!

Soil life

SOIL

actual & potential

ROAD NETWORK INCREASE EROSION

Loss of biodiversity in the soil

Climate change - drought, winds, floods

Contamination - Fertilisers, toxic byproducts

erosion

Salinity

Vegetation clearing

Acidity

SOIL DISTURBANCE

Not having a food source

OVER GRAZING

herbicides pesticides

Monocultures

PLANNING

Flood planning

Education

UTILISE RESEARCH FACILITY DATA (USA) USA.

Fertility

NEE

Destruction of Soil biology

DECLARED WEEDS

PEST ANIMALS
DEER
RABBITS
FERAL PIGS

What is the value of these natural assets? Why?

STRATEGIC AIM

LAND - soil. Why future generation? For the future. Retain & improve our soils.

We will

- We will assist farmers to plan for drought a floods & fire
- We will monitor our outcomes using latest technologies.
- We will reduce erosion retain our soils for future generations and improve the

We will... Save the fungi

We will be keeping internationally for soil conservation

IDENTIFY CONTAMINATED SOILS

Alluvial Soils

(HEALTHY) SOILS (PRODUCTIVE)

NO JOBS

these natural

ECONOMIC VALUE SMALL

Healthy soil sustains our flora - crops, rainforests, home gardens

UNDERPINS LARGEST INDUSTRIES

To host soil-based life forms

HOUSES BUILT ON THEM

NUTRIENTS

Water holding Capacity

WATER STORAGE

RECHARGE DAMS & LAKE

Productive Soil

CARBON CREDITS

Carbon Sequestration

CLIMATE CHANGE

MAINTAIN PASTURE COVER

MANAGE WATER FLOWS

MAN. DEFOR.

PLANNING

- Increased Soil biodiversity

Appropriate

Baselines

UTILISE RESEARCH FACILITY DATA (USA) USA.

Contaminated

THEME

LAND

SUBTHEME

LAND USE UNITS

Why do we need these natural assets?

UNIQUE COMBINATION IMPORTANT FOR PURPOSE

RECREATION USES

Protection - Flora, fauna, recreation

Economy - Farming, mining

NEED TO MAINTAIN IMPORTANT TYPES

Linking 'green' areas (corridors)

Housing

What are the threats - actual & potential?

Poor urban design

Poor Management

Inappropriate use of lands - Housing over farming - Mining over groundwater

Education

PLANNING LONG TERM

NEED TO IDENTIFY & QUANTIFY VALUE.

URBANISATION SUBDIVISION

Pest species

People + money

Clear divisions of land types

LEGISLATION STRONG LEGAL PROTECTION FOR DISCUSSION

Consultation -> LISTEN to the community

City expectations vs regional reality

Loss of family farms

\$

Baselines

Varied use (potential)

Failure to match best use with land type

Waste materials

What is needed to protect & value them? Why?

agricultural land

will... STRATEGIC AIM

Develop a planning system based on land suitability + existing community

The plan will be clear, consistent and rigorous

Use each land unit for its 'best' purpose (sustainable)

Raise understanding of the value of each land unit and system of units

Monitor the baselines to ensure continual improvement

LAND - use units - Best - who determines what is best? - Balance Environmental & Economic - Most Sustainable - Balance.

- Collaborative - Consider timeframe - Manage & Protect - Identified, - Our aim - each type of land unit

- Recognise diff. land units - Preserve, enhance -> (Renew)

THEME
LANDSCAPE

SUB
THEME
CONNECTED
LANDSCAPES

Why do we need these natural assets?

Community connection (local, regional, national), Bigger picture beyond LVR boundaries

habitat, scenic amenity, species survival, ecological processes, species movement, species w/ large home ranges, protect waterways / catchment integrity, carbon storage, climate change mitigation, nature-based recreation, cultural pathways & heritage, diversity (landforms, R's, spp...); genetic diversity, community connection, edge effects, refugia from extreme events

What are the threats - actual + potential?

- Land clearing for development (legal + illegal)
- Fragmentation
- Climate change (↑ temp, ↓ rainfall)
- Unsustainable water use (lack of environmental water)
- Inappropriate fire regime
- Overpopulation
- Lack of protection
- Inappropriate land use
- Pest species (flora + fauna)
- Natural disasters
- Lack of resources to protect + manage
- Lack of education
- Complacency
- Lack of value of natural assets
- Ineffective government legislation + policy
- Pesticides
- Lack of corridor policy

- Corridor Map
- Corridor Policy
 - Offsets
 - Reserves
 - Partnerships
 - Change in attitude
 - purchase land
 - wildlife crossings
- Education (incorporate nature into schools education, connection to land/country, excursions)
- Finances / Resources
 - 10 Public land
 - Tenure
 - Where are
- Policies / Enforcement
- Targets / Measures
 - "link green spots"
 - mapping of baseline data
 - Baseline Data
 - legislation
 - 10 the values/patches we are trying to connect
- Community engagement + buy-in
- Co-ordination (Land Man^t, Fire)
- High Quality Biodiversity map layer

What is needed to protect + value these natural assets? Why?

We will ...

STRATEGIC AIM

maintain and improve connectivity in the landscape to conserve and enhance biodiversity.

Pesticides

LACK OF CORRIDOR POLICY

CARBON STORAGE

Connected Corridors

Connectivity of Bush Land in SW, Kallaw

Large natural habitat patches

Diversity of natural assets

ROAD VERGES

Diverse urban environments

Real life Connected Landscapes

TIME

TABLE TOP
MOUNTAIN
LAST FRONTIER
BATTLE

Non-indigenous
Cultural
Site

HOLIDAY
SPAS
HEALING PLACE

BIRTHING
CAVE

CHULLAWONG
ROCK
ANCIENT ROCK ART

Scattered
artefacts

Challawong
rock.

Scattered
trees

Aboriginal
cultural
heritage.

HISTORICAL
SITES

**SUB
THEME**

CULTURAL
HERITAGE

Why do we need these natural assets?

History belongs to this country, honour & remember history, education, conserve cultural identity, health & wellbeing, community connectedness to country, community diversity, Tourism, economic value, protection of totems.

are these
- actual + potential?

- Land clearing + development
- fragmentation. • Developers
- Climate change. • Lack of enforcement/Protection
- Loss of cultural knowledge. • Impact of finding CH. • Inconsistent government legislation.
- Unsustainable water use (affects totems). • Lack of resources to protect + manage.
- Inappropriate fire regime. • Lack of knowledge.
- Sites + cultural values not identified + protected. • + coordinated.
- Inappropriate land use. • Native Title processes
- Invasive species. (flora, fauna)
- Natural disasters. • Community disconnection to culture.
 - flooding - bush fire
 - Drought - extreme heat
 - excessive rain. • Lack of community value of natural assets.
- Lack of education.

- Education
- Community engagement + buy in ^{Original peoples of Lockyer Valley}
- Cultural Heritage Policy + Enforcement
- Finances + Resources
- Map of locations.
- An up to date, robust + consistent dataset (Qualitative + Quantitative) of existing cultural heritage sites

What is needed to protect + value these natural assets? Why?

we will ...

STRATEGIC AIM

Value, protect, preserve + embrace the cultural heritage in our region.

ACTION
Develop and strengthen the relationship between the community + cultural sites

Protect cultural sites + heritage

ANSWER - cultural heritage
- preservation of f&f of aboriginal people.
- research guiding principle. ✓
flora & fauna.

acknowledge original land practices.

THEME

LANDSCAPE

SUB-THEME

LANDFORMS

Why do we need these natural assets?

Diversity of landforms; protect from extreme events, provide unique habitats, provide unique experiences, endemism, circle of life; nature-based recreation/tourism; scenic amenity, support a diverse economy / landuses (farming, extractive ind, urban development)

Mountain Ranges

Volcanic Rock Screens (Screens)

Floodplains

Hillslope vegetation

Zones (hills, valleys, flats, towns)

Existing Biodiversity on Private & Public Land

What are the threats - actual & potential?

- Quarrying / Extractive Industry
- Development & land clearing
- Fragmentation
- Climate change - rainfall
- Unsustainable water use for non environmental purposes.
- Inappropriate fire regimes management
- Over population
- Protecting diversity of different land forms.
- Inappropriate land use
- Lack of coordinate landuse protection
- Pest & weeds infestation
- Natural disasters (fire, flood, drought, cyclone, extreme heat)
- Poor farm management practices
- Lack of education - legislation
- Lack of human connection to land
- We don't value our natural assets.
- Air pollution erosion

- Planning Scheme Policy - Enforcement
- Policy & Enforcement
- Education
- Community engagement & buy in

* Need geographical understanding of our natural land forms - MOUNTAIN RANGES, VOLCANIC ROCK SCREENS etc

* Inventory of landforms - identify extent, quality, degradation of asset. Priority

What is needed to protect & value them? Why?

We will...

STRATEGIC AIM

We will value, protect, preserve & embrace our diverse land forms.

THEME
LANDSCAPE

SUB-THEME
SPECIAL PLACES

Why do we need these natural assets?

- SOME-UNIQUE ASSEMBLAGE OF SPECIES + HABITAT
- LARGE + SMALL + INTACT TRACTS
- UNIQUE + SPECIFIC TO LOCKYER VALLEY
- PROVIDE STEPPING STONES TO
- CONNECTION TO CULTURAL VALUES
- SENSE OF PLACE/IDENTITY
- WATER QUALITY + RECHARGE
- HISTORIC VALUES
- ECONOMIC VALUES (TOURISM, HEALTH)

Holdon Hills
diversity of ecosystems
Little Liverpool Range

Feedback

What are the threats - actual & potential?

- LAND CLEARING
- FRAGMENTATION
- CLIMATE CHANGE
- UNSUSTAINABLE WATER USE (LACK OF WATER)
- INAPPROPRIATE FIRE REGIMES
- OVER POPULATION (HUMAN)
- LACK OF PROTECTION (CO-ORDINATED)
- INAPPROPRIATE LAND USE
- PESTS + WEEDS.
- NATURAL DISASTERS (FLOOD, CYCLONE, DROUGHT, BUSHFIRES, EARTHQUAKES, EXTREME HEAT/COLD)
- LACK OF RESOURCES TO PROTECT + MANAGE
- LACK OF EDUCATION
- LACK OF COMMUNITY VALUE FOR NATURAL RESOURCES
- PROTECT + ENHANCE VALUE OF SPECIAL PLACES
- LEGISLATION
- COMMUNITY COLLECTION + HARVEST OF FLORA
- OVER-USE + INAPPROPRIATE USE (KITES, HORSE-RIDING, GEOCACHING)

protect + enhance value of special places
LEGISLATION
COMMUNITY COLLECTION + HARVEST OF FLORA
OVER-USE + INAPPROPRIATE USE (KITES, HORSE-RIDING, GEOCACHING)

Identification
Criteria for establishing identifying
Collaboration
Data and mapping

Site specific ecosystems
Condwana Rainforest (rain Range)
Glen Rock
Major Range
Nip Range

What is needed to protect & value these natural assets? Why?

We will....

STRATEGIC AIM

protect, and enhance ~~the value of~~ our special places, for the enjoyment of all....

Focus to Landscape - special places.
- protect & enhance for all.

enjoyment of the community and protection the conservation of (flora + fauna)
beings?
lifeforms?

FLAGSTONE CREEK CONSERVATION PARK LAKE APEX
Tenthill C.P.
Dwyers Scrub C.P.
NATIONAL PARKS
SELECTED AREAS

THEME

WATER

SUBTHEME

Sources

Supplementary Water

Why do we need these natural assets?

- Sustain life
- Economy of LV
- Ecosystem sustaining

• Amenity

• Jobs

Rain

What are the threats - actual & potential?

Climate change

Wastage

Cost

Availability

Loss of clean / green branding & image

Community engagement to share knowledge

Education

Accurate Baseline Data

Budgeting

Access to & sharing historic local knowledge

Compliance of water legislation

Continuous Review of monitoring

Consistency of data sets

Knowledge of hydrology

Enforcement of water legislation

Co-ordination of monitoring data

Valuing qualitative data

Skills

What is needed to protect & value them? Why?

We will.....

Water sources - limitation - & water source open to control population - Adequate quality & quantity (2013) IC

Water security - (water sources)

... Use ~~historical~~ agreed data to inform action for everyone.

- Invest in education & engagement to increase the knowledge of the importance & sustainability of our water systems.
- have adequate clean drinking water for an expanding population.
- adequate water for agriculture use.

Adequate water to sustain local ecosystems

THEME
WATER

SUB-THEME

Processes
&
Systems

Why do we need these natural assets?

• Clean water purification
• Water distribution

SURVIVAL

• Water regeneration

Sustainable pricing of water

• Support ecosystems

Keep water in the Valley

Water + Catchments

RIPARIAN ZONES

MILLARD CREEK RIPARIAN ZONE

Locker uplands recharging areas

Evaporation & Transpiration

Infiltration

Agricultural Runoff
GROUND WATER SYSTEMS

NATIVE AQUATIC LIFE

GROUNDWATER DEPENDENT ECOSYSTEMS

What are the threats - actual & potential?

DEFORESTATION

• Water has moderating effect on temperature
→ climate hotter

Vegetation
→ nanoparticles
→ rain

Degradation of ecosystems

Air quality impacts water quality

Human interference in landscape

- Clearing
- Overgrazing
- Weeds
- Hard surfaces
- Ag practices
- Discharge of pollutants to waterways
- Non-management of human interferences as weirs silted

knowledge of hydrology.

Skill

Continuous review of processes + systems.

Education.

Enforcement + Compliance of water legislation

Value in qualitative data

- Accurate baseline data to inform planning.
- Community engagement

What is needed to protect & value them? Why?

We will... STRATEGIC AIM

- use historical a robust monitoring + compliance system to regulate water use.

humans & wild life, ecosystems! protect, & manage.

land, manage + improve water processes

we production and environmental needs thoughtfully

THEME:
WATER

SUB-THEME

Surface Features

Why do we need these natural assets?

Water storage
Recreation
Ecosystems

Agriculture
Wildlife (birdlife)

Mitigate floods / control water flow in landscape

Eco-tourism
Recreation
Fishing
Financial benefit to community & maintain assets

Amenity

What are the threats - actual & potential?

PESTS - DEER, CAMELTHORN, PIGS.

SALINITY

Poor planning & protection (government)

WEEDS
MADERA VINE
CATS
KOP - RESTRICTED

LIVESTOCK

Too much tourism

Erosion & Sediment buildup

Chemical / ~~etc~~ spill -> pollution

Wastage

ACCURATE BASELINE DATA

Skill

Compliance of water legislation

LOCAL HISTORICAL KNOWLEDGE RECORDED + ACCESSIBLE

Community engagement to share knowledge

education

review of monitoring

creeks

wetlands

DAMS

Billabongs / waterholes

EPHEMERAL WATERWAYS

What is needed to protect & value these natural assets? why?

STRATEGIC AIM

We will

HAVE HEALTHY CLEAN ADEQUATE WATER SYSTEM

WE WILL USE A ROBUST MONITORING + COMPLIANCE SYSTEM TO REGULATE WATER USE.

THEME
WATER

SUBTHEME
Sub-surface
Features

Why do we need these natural assets?

- Support GDE's
- Purification
- Distribution

- Storage
- Agriculture

Springs

Geology

Economy

Managing salinity

HELIDON SPA
AQUIFER

WATER ARTISAN
SOME DIGGERS
BUT CAN'T RECHARGE
OUTSIDE OF
VALLEY

Water
AQUIFERS
From Basalt
Springs WES

What are the threats - actual & potential?

Over-extraction

Salinity

Damage to
Riparian
Zones

Mining

Excavation/
cut & fill

Availability

Pollution
&
contamination
of PFAS

Accurate data.
knowledge of *recharge areas*
education.

community engagement to
share knowledge.

skills

compliance with legislation

Knowledge of hydrology.

What is needed to protect & value them?

WATER - Subsurface
features.
also consider taking
care of use of ground
water.
• dependent on rain/
springs, etc.

We will...

STRATEGIC AIM

ensure ground water recharge
use historical data to inform future actions +
planning for everyone. *occurring adequately*

protect recharge areas for groundwater
invest in education + engagement to increase
the knowledge of the importance + sustainability of
our water systems.

• bit more work, complex
issue.
• Talk about ground
water levels/quality.
• Sub surface.

Subsurface features.
• maintain quality of
water.
• define adequate to
agriculture & population
• How define adequate?