

# CONSERVATION FROM THE GROUND UP: RULES OF ENGAGEMENT



Why 'education' is not enough to gain community support for restoration and conservation: examples from around the world, and from Ireland



# **WHAT IS ECOLOGICAL RESTORATION?**

- **“ECOLOGICAL RESTORATION IS AN INTENTIONAL ACTIVITY THAT INITIATES OR ACCELERATES THE RECOVERY OF AN ECOSYSTEM WITH RESPECT TO ITS HEALTH, INTEGRITY AND SUSTAINABILITY.”**
- **DEFINITION IN SOCIETY FOR ECOLOGICAL RESTORATION (SER) PRIMER, 2005.**



# EXAMPLES OF RESTORATION

- **FOUR ASPECTS OF THE SAME ENTERPRISE:**
- **REVERSING DAMAGE HUMANS HAVE DONE TO AN ECOSYSTEM**
- **RECREATING AN EARLIER COMMUNITY OF PLANTS AND ANIMALS**
- **RE-ENGINEERING ECOSYSTEM DYNAMICS, RECOVERING ECOSYSTEM SERVICES, FOR EXAMPLE FLOOD CONTROL AND WATER PURIFICATION BY WETLANDS, BIODIVERSITY, HEALTH, AESTHETIC AND SPIRITUAL BENEFITS**
- **RESTOCKING A LANDSCAPE WITH RENEWABLE NATURAL CAPITAL ASSETS, SUCH AS FERTILE SOIL, POTABLE WATER, TIMBER, FISH AND GAME**



# RESTORING THE FUTURE

- **EARLY RESTORATIONISTS OFTEN THOUGHT IN TERMS OF RESTORING TO TARGETS BASED ON TWO CONCEPTS:**
- **A 'PRISTINE' POINT IN THE PAST, AND A 'STABLE' CLIMAX ECOSYSTEM**
- **BOTH CONCEPTS ARE FLAWED -- HUMANS HAVE INFLUENCED ECOSYSTEMS FOR A VERY LONG TIME; ALL ECOSYSTEMS ARE DYNAMIC, NOT STABLE.**
- **WELL-INFORMED CONTEMPORARY RESTORATION PROJECTS SEEK TO RESTORE DEGRADED SYSTEMS TO THE TRAJECTORY FROM WHICH THEY HAD BEEN DIVERTED, GUIDED BY THEIR PAST HISTORY, BUT WORKING IN THE PRESENT TO RESTORE THE FUTURE.**



# **NO SILVER BULLET...**

- **RESTORATION OFFERS HOPE, BUT BEAR IN MIND:**
- **WE CONSUME FAR MORE OF THE EARTH'S RESOURCES, EVERY YEAR, THAN WE RESTORE**
- **WE ARE STILL ACCELERATING CLIMATE CHANGE, MAKING RESTORATION EVER MORE COMPLEX AND PROBLEMATIC**
- **OUR ECONOMIC AND SOCIAL MODEL, FIXATED ON EVER-INCREASING CONSUMPTION, IS BECOMING GLOBALIZED TO VAST NEW POPULATIONS**
- **RESTORATION WILL ONLY FULFILL ITS POTENTIAL IF OUR ECONOMIC AND SOCIAL MODEL SHIFTS TO GENUINE SUSTAINABILITY**



# RESTORATION BENEFITS

- A UNIQUE LEARNING PROCESS ABOUT OUR ENVIRONMENT -- YOU ONLY KNOW HOW SOMETHING REALLY WORKS WHEN YOU TRY TO REBUILD IT, EVEN IF YOU FAIL
- THE RECOVERY OF NATIVE BIODIVERSITY, FROM OUR BACKYARDS TO REMOTE PLACES
- RESTORATION OF NATURAL CAPITAL, ECOSYSTEM GOOD AND SERVICES -- ECONOMIC AND NON-ECONOMIC BENEFITS
- A NEW PARADIGM FOR A POSITIVE INTERACTIVE RELATIONSHIP -- **ENGAGEMENT** -- BETWEEN HUMANS AND NATURE
- FOR THAT TO WORK, RESTORATION ADVOCATES HAVE TO ENGAGE WITH OTHER HUMANS TOO



# HIDDEN RESTORATION BENEFITS



COURTESY IRISH GREY PARTRIDGE CONSERVATION TRUST

RESTORING GREY PARTRIDGE HABITAT  
RESTORES THE CROP YIELD



# WE RESTORE IN A HUMAN-SHAPED WORLD



MOST ECOSYSTEMS ARE NESTED IN  
CULTURAL LANDSCAPES:  
SOMETIMES THIS IS OBVIOUS...



SOMETIMES IT'S NOT SO OBVIOUS...



**BUT HUMAN IMPACTS ARE PERVASIVE  
ACROSS THE PLANET, AND OFTEN  
ECOLOGICALLY SIGNIFICANT  
FOR GOOD RESTORATION**



# **SOCIAL RESTORATION?**

- **THERE ARE MANY ECOLOGICAL/TECHNICAL CHALLENGES IN RESTORATION, BUT EVEN WHEN THESE ARE OVERCOME, RESTORATION WILL FAIL UNLESS IT IS ROOTED IN THE ACTIVE CONSENT OF HUMAN COMMUNITIES WITH A STAKE IN THE SITE**
- **IF WE ARE DEALING WITH HUMAN-SHAPED ECOSYSTEMS, CULTURAL LANDSCAPES, SOCIO-ECOSYSTEMS, THAT'S ONE MORE REASON RESTORATION HAD BETTER ENGAGE WITH THE HUMANS WHO LIVE AND WORK IN THEM**
- **IN THIS SENSE, ALL ECOLOGICAL RESTORATION IS SOCIAL RESTORATION. WE FORGET THIS AT OUR PERIL...**



**THERE ARE STRONG  
ARGUMENTS FOR  
RESTORATION.**

**BUT NOT EVERYONE  
ACCEPTS THEM.**

**WHAT THEN?**



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# **COMMUNITY CONSENT IS ESSENTIAL TO RESTORATION**

- **RESTORATION IS DONE BY HUMANS, FOR HUMANS, IN A HUMAN-SHAPED WORLD -- AND IT NEEDS HUMAN CONSENT IF IT IS TO WORK WELL**
- **ENGAGEMENT WITH COMMUNITIES IS ESSENTIAL TO SUCCESSFUL RESTORATION, ESPECIALLY ON PUBLIC LAND**
- **BUT THIS IS NOT ALWAYS UNDERSTOOD...**





**A CAUTIONARY TALE FROM THE  
NORTH BRANCH OF THE CHICAGO RIVER:  
BURNING PRAIRIES...**





**...RESTORES BEAUTIFUL LANDSCAPES  
BUT MAY ALSO AROUSE...**



**...BURNING  
PASSIONS:  
HOW DO YOU  
DEAL WITH  
OPPOSITION  
FROM THE  
COMMUNITY?**



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“THOSE WHO ARE ECOLOGICALLY  
EDUCATED WILL NOT RESIST US”



BUT MANY WHO  
WERE  
'ECOLOGICALLY  
EDUCATED' DID  
'RESIST'...  
**WHAT THEN?**



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# **ECOLOGICAL EDUCATION?**

- **‘ECOLOGICAL EDUCATION’ IS NOT THE TRANSFER OF A SET OF RECEIVED TRUTHS FROM AN EDUCATED MIND TO AN UNEDUCATED ONE**
- **ECOLOGY EDUCATION IS AN ONGOING PROCESS OF DISCOVERY, AND MUST BE OPEN TO DOUBT, CHALLENGE AND REVISION BY NEW EVIDENCE**
- **OUTREACH AND EDUCATION PROGRAMMES CAN CERTAINLY OFFER INFORMATION**
- **BUT IT IS AT LEAST AS IMPORTANT FOR RESTORATIONISTS TO ENGAGE RESPECTFULLY WITH LOCAL COMMUNITIES, LISTEN AT LEAST AS MUCH AS THEY TALK, AND ACCEPT DEMOCRATIC PRINCIPLES**





# **CONFLICT AND RESOLUTION ALONG THE SACRAMENTO**



# **SACRAMENTO RIVER CONSERVATION AREA FORUM**

- **CONSERVATIONISTS TEND TO HIGHLIGHT ECONOMIC AND ECOLOGICAL BENEFITS OF RESTORATION, AND DOWNPLAY OR DENY THE DOWNSIDES**
- **SOME RIPARIAN LANDOWNERS AND RURAL DWELLERS PERCEIVE NEGATIVE NET IMPACTS OF RESTORATION; OR THEY FEEL ALL THE BENEFITS ARE ‘DOWNSTREAM’; SOMETIMES THEY ARE RIGHT.**
- **EVEN IF THEY ARE NOT RIGHT, THEY STILL HAVE RIGHTS...**
- **TARGET REDUCED FROM 86,000 HA TO 32,000 HA AFTER 100+ FARMERS SPOKE OUT AGAINST RESTORATION AT A PUBLIC MEETING**



# **GOOD NEIGHBOR POLICY**

- **CONFLICT RESOLUTION: BETTER COMMUNICATION, HONESTY, EARLY AND CONTINUED LOCAL INVOLVEMENT IN PLANNING AND IMPLEMENTATION**
- **“THE CHALLENGE IS TO UNDERSTAND THE VARIOUS LAND USES TO THE EXTENT THAT EACH CAN BE MANAGED TO REMOVE OR MINIMIZE THE NEGATIVE IMPACT ON THE OTHERS”**
- **“WHERE CONFLICT AND HARMS ARE UNAVOIDABLE, THERE SHOULD BE A MECHANISM TO DETERMINE THE EXTENT OF IMPACTS,” AND RESOURCES MADE AVAILABLE TO COMPENSATE OR FIND ACCEPTABLE SOLUTIONS**





# **WORKING OUT WORKING FOR WATER: RESTORING RELATIONSHIPS**



# **WFW: A WIN, WIN, WIN RESTORATION PROJECT?**

- **WFW COMBINES ECOLOGICAL, ECONOMIC AND SOCIAL GOALS**
- **DO SUCH MULTIPLE TARGETS CREATE DYNAMIC SYNERGIES, OR DO THEY UNDERMINE EACH OTHER?**
- **PROBLEMS APLENTY, BUT OPEN AND ADAPTIVE MANAGEMENT MOVES THE WHOLE PROJECT FORWARD**



# THE BATTLE OF THE BOGS

THE DISASTER OF TOP-  
DOWN, DESIGNATION-  
BASED CONSERVATION  
POLICY  
IN IRELAND'S ICONIC  
WETLANDS



EAMONN FARRELL/PHOTOCALLIRELAND



# CONSERVATION = **‘DON’T DO THIS, DON’T DO THAT’?**

- **“THE FIRST THING MOST IRISH FARMERS LEARNED OFFICIALLY ABOUT ‘CONSERVATION’ WAS A LETTER FROM DUBLIN, TRANSMITTING A DIRECTIVE FROM BRUSSELS, TELLING THEM ALL THE THINGS THEY COULD NOT DO ON THEIR OWN LAND.”**
- **DR BRENDAN DUNFORD, AGRICULTURAL ADVISOR AND PROGRAMME MANAGER OF THE BURRENLIFE PROJECT.**





# **CONFLICT RESOLUTION ON THE BURREN**





# **BURRENBEO/BURRENLIFE FARMING FOR CONSERVATION**



# PRODUCING ENVIRONMENTS

- FOR ME SPECIES-RICH GRASSLAND IS THE CORN OF THE SOUTH; IT IS THE BEEF OF LEINSTER AND IT IS THE MILK OF MUNSTER. THIS PRODUCES MORE INCOME PER HECTARE FOR ME THAN LIVESTOCK DOES, BUT I NEED TO FARM IT WITH THOSE CATTLE TO GET THE MONEY. IN THE PAST WE RAISED CATTLE TO EARN A LIVING. NOW WE RAISE CATTLE TO PRODUCE A PRISTINE ENVIRONMENT, WHICH GIVES ME A LIVING.
- THE ENVIRONMENTALISTS WILL STATE WHAT WE NEED TO PROTECT AND THE FARMERS WILL DECIDE HOW IT CAN BE PROTECTED. I KNOW THIS BECAUSE FOR 4,500 YEARS THE FARMERS PROTECTED IT BY ACCIDENT. THEY PRODUCED LIVESTOCK TO LIVE AND THE ENVIRONMENT WAS THE BY-PRODUCT. TODAY, THE ENVIRONMENT IS THE PRODUCT AND THE CATTLE ARE THE BY-PRODUCT.
- **MICHAEL DAVOREN**, LOCAL FARMER AND LOCAL IFA LEADER, ONE OF THE INITIATORS OF THE BURRENLIFE PROGRAMME, ADDRESSING DAIL AGRICULTURE COMMITTEE, 2013



# **NEW THINKING ON CATCHMENT MANAGEMENT FROM THE IRISH EPA**

- **AN EPA EXECUTIVE CRITIZES EXISTING PRACTICE --  
“THE MAIN EMPHASIS TO DATE HAS BEEN ON  
THE ‘COMMAND AND CONTROL’ APPROACH,  
USING INSPECTIONS AND COMPLIANCE-CHECKING  
RATHER THAN SEEKING BEHAVIOURAL CHANGE  
THROUGH STAKEHOLDER AWARENESS AND  
INVOLVEMENT.**
- **“THE STARTING POINT, THEN, MIGHT BE SEEKING  
BEHAVIOURAL CHANGE FROM MANAGERS!”**
- **MAKING INTEGRATED CATCHMENT MANAGEMENT HAPPEN -- DONAL  
DALY, IRISH EPA DISCUSSION DOCUMENT 2013**



# **‘A TWO-WAY PROCESS’**

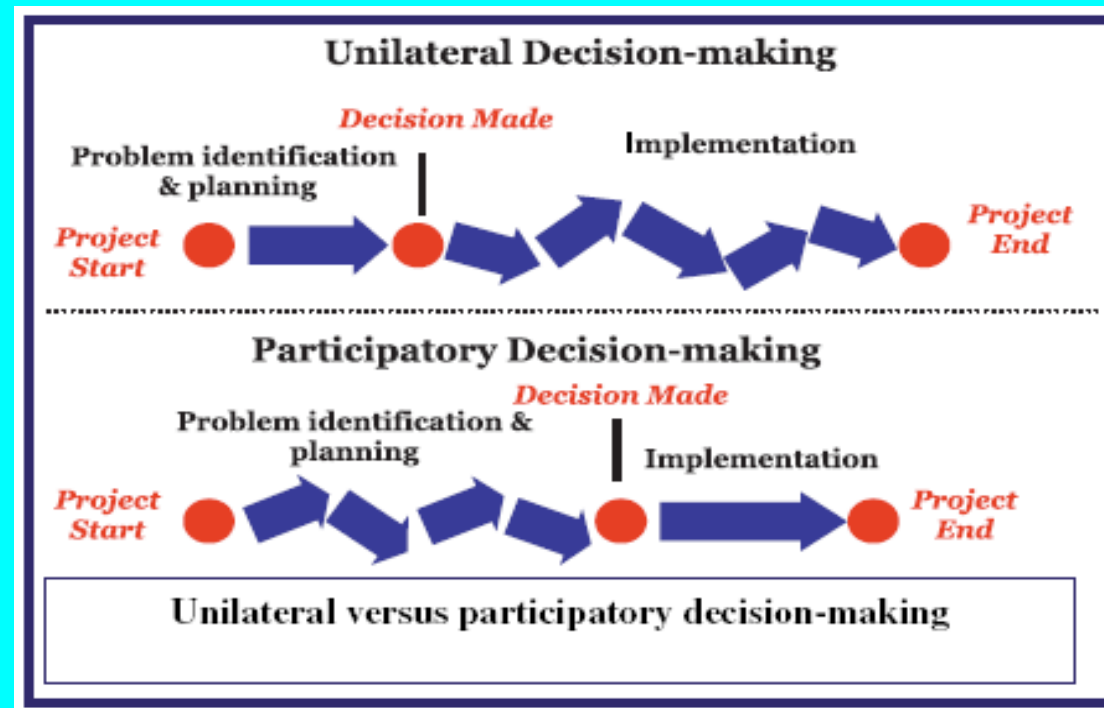
- **PARADIGM SHIFT “TO PARTNERSHIPS WITH LOCAL COMMUNITIES AND EMPHASIS ON CITIZEN ENGAGEMENT THAT INCLUDES IDENTIFYING KEY STAKEHOLDERS, PUBLIC AWARENESS AND OUTREACH CAMPAIGNS, IDENTIFYING ISSUES OF CONCERN, AND OBTAINING AND TAKING ACCOUNT OF FEEDBACK”.**
- **“IT NEEDS TO BE A TWO-WAY PROCESS. ACCOUNT MUST BE TAKEN OF ALL VIEWS”**
- **MAKING INTEGRATED CATCHMENT MANAGEMENT HAPPEN -- DONAL DALY, IRISH EPA DISCUSSION DOCUMENT 2013**



# **STREAMSCAPES STRATEGY ON PUBLIC ENGAGEMENT**

- **THE PROPER SCALE AT WHICH TO ADDRESS ENVIRONMENTAL ISSUES IS THE CATCHMENT LEVEL**
- **ENGAGE A SMALL CRITICAL MASS (C. 5%) OF LOCAL POPULATION IN RESOURCE AWARENESS**
- **UTILISE MULTIPLE (AND CREATIVE) 'HOOKS' TO ENGAGE PEOPLE ON THEIR OWN TERMS IN THE EFFORTS TO PROMOTE STEWARDSHIP OF WATER QUALITY**
- **SCHOOLS, CORPORATE, AND COMMUNITY & VOLUNTARY GROUPS HAVE A KEY ROLE TO PLAY**
- **MARK BOYDEN, PUBLIC ENGAGEMENT ON WATER QUALITY ISSUES, EPA SMALL SCALE STUDY REF/ 2014-W-SS-16**





*Image from HarmoniCOP Handbook, 1.2.3; "Participatory decision-making processes usually take much more time than unilateral decision-making by water managers. However, as illustrated in this figure, this is usually more than offset by time gains (and, by implication, effectiveness) in the implementation phase."*

# TIME WELL SPENT!



# REVELATIONS OF NATURAL WONDERS...


- **STREAMSCAPES SET OUT FROM THE VERY BEGINNING TO COME FROM A PLACE OF RESPECT FOR ALL CONSTITUENTS, TO CREATE A FORUM WHERE SOLUTIONS TO ENVIRONMENTAL PROBLEMS ASSOCIATED WITH GIVEN SECTORS WERE ELICITED FROM WITHIN THOSE SECTORS IN AN EFFORT TO PROMOTE 'BOTTOM-UP' INITIATIVES AND CREATE THE BASIS FOR ENHANCED PARTICIPATION IN (AND OWNERSHIP OF ) THE IDENTIFICATION AND IMPLEMENTATION OF SOLUTIONS**
- **....STREAMSCAPES ACTIVITIES PROCEED FROM THIS SUSPENSION OF JUDGEMENT, THE PRIMARY FOCUS OF ENGAGEMENT SHIFTS TO BEING A REVELATION NATURAL WONDERS (VIA AWARENESS EDUCATION, FIELD TRIPS, ETC.) IN THE CONVICTION THAT THIS EXPOSURE MAY ASSIST PARTICIPANTS TO VOLUNTARILY ASPIRE TO BE STEWARDS OF LOCAL AQUATIC AND BIODIVERSITY RESOURCES.**
- **MARK BOYDEN, PUBLIC ENGAGEMENT ON WATER QUALITY ISSUES, EPA  
SMALL SCALE STUDY REF/ 2014-W-SS-16**



# **‘HOW IS MY FISH GETTING ON?’**

- **1) LOCALISING ENVIRONMENTAL EDUCATION: THE ENVIRONMENT ISN'T SOMETHING THAT HAPPENS SOMEWHERE ELSE...IT HAPPENS ALL AROUND US, IN OUR GARDENS, ON OUR FARMS, IN OUR VILLAGES AND TOWNS. THE CHALLENGE IS TO LOCALISE OUR RELATIONSHIP WITH THE ‘ENVIRONMENT’ SO THAT WE UNDERSTAND THAT WE ARE INEXTRICABLY LINKED TO THE HABITATS, SPECIES, AND ECOLOGICAL PROCESSES WHICH SURROUND US AND WHICH WE ARE CONSTANTLY PART OF.**
  
- **2) PERSONALISING PARTICIPANTS’ RELATIONSHIP WITH THE ENVIRONMENT: ... RECENTLY IN A STREAMSCAPES PROJECT IN COUNTY FERMANAGH WE WOULD DO THINGS LIKE SET UP AQUARIA IN CLASSROOMS SO STUDENTS COULD HATCH THEIR OWN SALMON EGGS AND WITNESS THIS MIRACLE RIGHT IN THEIR SCHOOLS. SUBSEQUENTLY, PARTICIPATING SCHOOLS COME TOGETHER TO RELEASE THE (LOCAL) YOUNG SALMON INTO THEIR LOCAL RIVER. YOU DON’T LEAVE AN EVENT LIKE THAT WONDERING ABOUT AN ABSTRACT ‘ENVIRONMENT’... INSTEAD, PEOPLE WOULD SAY, ‘I WONDER HOW MY FISH IS GETTING ON?’ AND NATURALLY SEEK TO KNOW WHAT BEHAVIOURS WOULD INCREASE THE CHANCE OF ‘MY FISH’ SURVIVING!**
  
- **MARK BOYDEN, PUBLIC ENGAGEMENT ON WATER QUALITY ISSUES, EPA SMALL SCALE STUDY REF/ 2014-W-SS-16**





Dr. Janice Fuller

**“WHAT DO WE VALUE IN OUR HOME PLACES?  
HOW CAN WE ENHANCE WHAT WE VALUE?  
INVITE THE PUBLIC TO CONTRIBUTE VALUES, TO  
SUPPLY KNOWLEDGE.”**

**[WWW.JANICEFULLER.IE](http://WWW.JANICEFULLER.IE)**



# AN ENSPIRITING VISION

**“LET US GO BEYOND MERE SALVAGE TO BEGIN THE  
RESTORATION OF NATURAL ENVIRONMENTS... THERE CAN  
BE **NO PURPOSE MORE ENSPIRITING** THAN TO BEGIN THE  
AGE OF RESTORATION, REWEAVING THE WONDROUS  
DIVERSITY OF LIFE THAT STILL SURROUNDS US.”**

**-- EO WILSON**





**THE CHALLENGE: ENGAGE WITH THE  
PUBLIC TO SHARE  
THAT RESTORATION VISION**