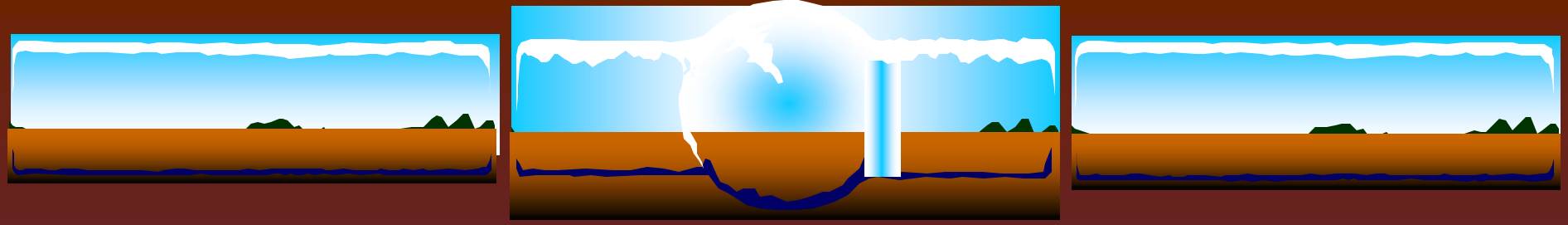

DOE's EGS Program Review

Roadmapping

- Clay Nichols
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- 208-946-0333
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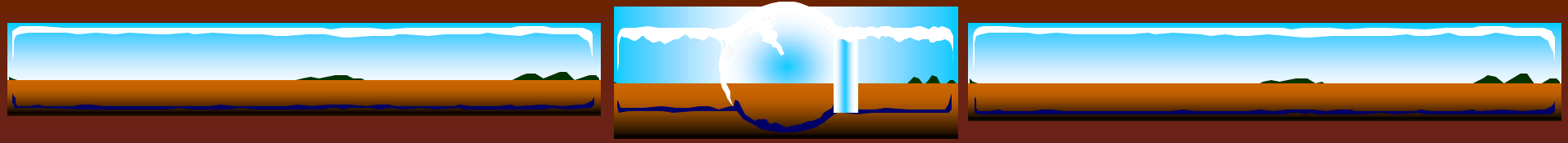
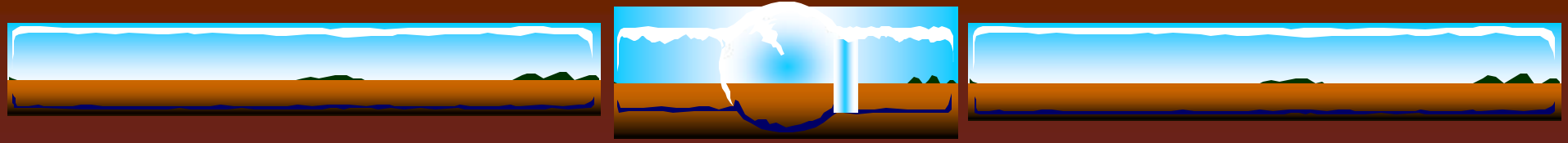


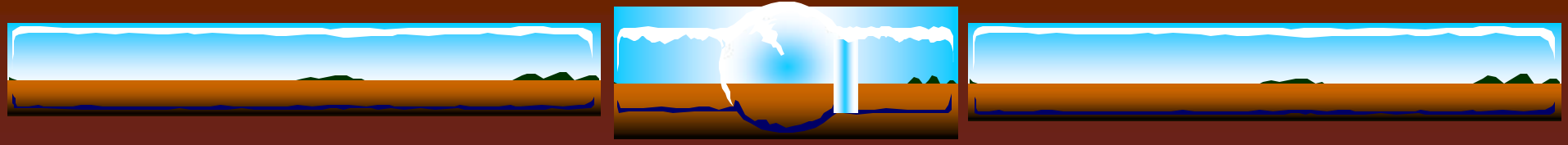
GTP/EGS Roadmapping Objective

- GTP/EGS roadmapping defines a technical pathway for the Program
- The roadmapping process strengthens team effectiveness
- The completed roadmap communicates a shared vision for the Program



Background : GTP/EGS Roadmapping Effort

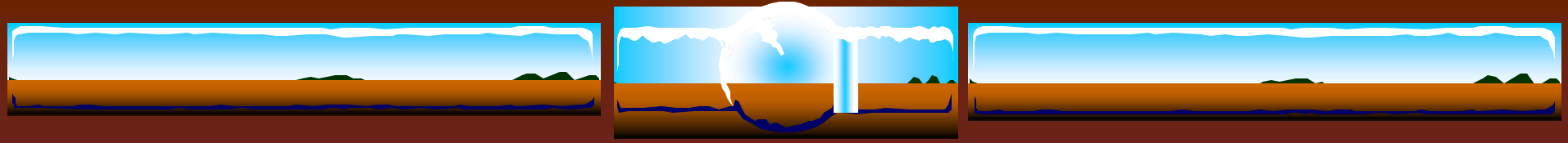
- Approach popularized by Bob Galvin
- Science and technology roadmapping is a tool for focusing on priorities and defining the critical path for achieving challenging S & T objectives
- Budget concerns and technical challenges combine to favor a roadmapping approach
- What technical issue does the project address?
- See EGS Technical Challenges and Barriers in Draft GTP Multiyear Plan: *http://www1.eere.energy.gov/geothermal/program_review.html*
- How will project help to achieve overall program goals?



The GTP/ EGS Roadmapping Effort

Approach

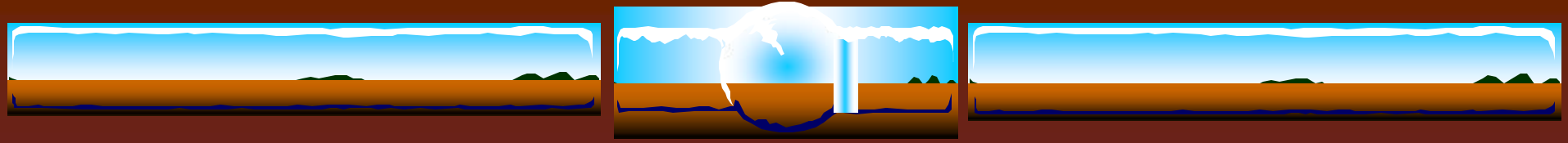
- **Core Team/Surveys**
- **Internet conferencing**
- **Stanford workshop**
- **Review/Revisions**



Results/Accomplishments

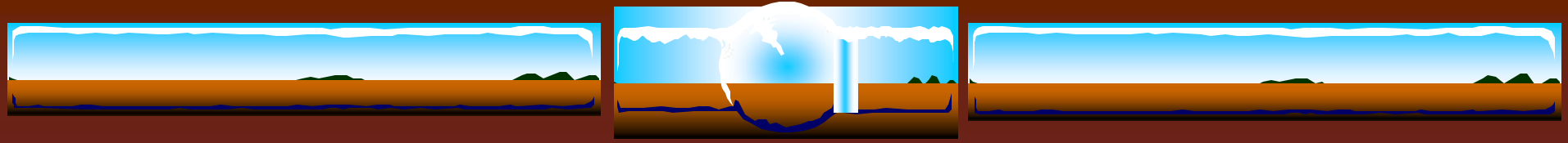
Pathways/Technologies Considered

- Site characterization
- Wellfield construction and management
- Resource management
- Productivity/permeability enhancement
- Energy conversion



Results/Accomplishments

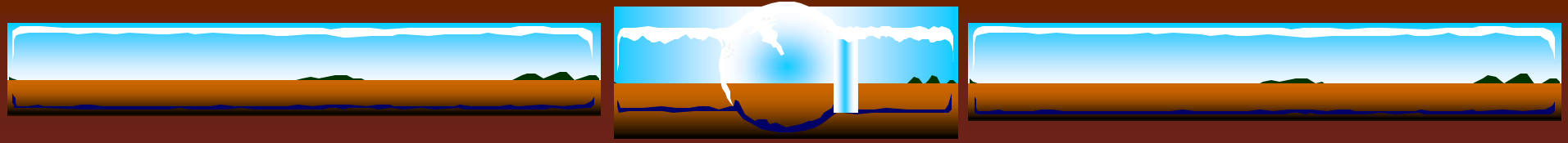
- 58 milestones identified supporting these five major technology groupings
- Summarized in GTP/EGS Program milestones graphic; (Fig. 3-2) and Milestone explanatory notes



Application to EGS Planning

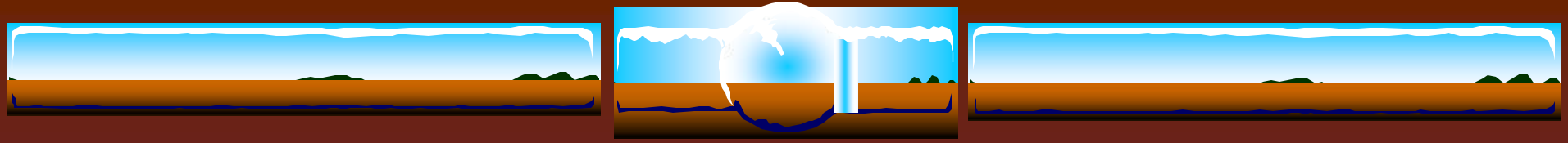
Focus of roadmapping EGS planning

- Site Characterization
- Resource management
- Productivity/permeability enhancement



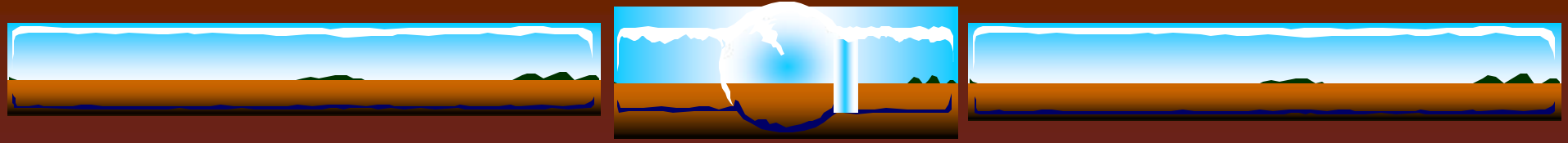
Technical Workgroup Approach

- Each Technical Workgroup should identify what is required to reduce risk and improve knowledge relevant to its technical scope
- The identified tasks should be addressed in two time categories:
  - Near term-during the next 30 months (January, 2009)
  - Long term-Post January,2009



Workgroup Approach (Cont'd)

- Select pathways for detailed planning based on personal knowledge, EGS Feasibility Study and Roadmap recommendations.
- For each of the risk-reducing technologies selected, what is the objective? (By year x, what capability needs to be developed to achieve the programmatic goals in each of these three sub-elements?)
- What is the status of the technology supporting this pathway?
- What are the technical achievements required to accomplish the programmatic goals for this pathway?



Conclusion

- Roadmapping provides a logical approach for planning implementation of EGS Capabilities development
- Draft GTP/EGS Roadmapping and EGS Feasibility Study provide starting points for consideration of capabilities required to reduce risk
- Cross-disciplinary composition of workgroup teams encourages barrier identification and creative solutions